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**Analysis of United States Air Forces Central Government
Purchase Card Reachback Viability**

1 December 2011

by

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Analysis of United States Air Forces Central Government Purchase Card Reachback Viability

ABSTRACT

This project investigates the viability of performing United States Air Forces Central (USAFCENT) government purchase card (GPC) purchases by utilizing reachback services. The study analyzed FY 2011 data to include the number of deployed contingency contracting officers (CCOs), GPC actions, and total contract actions at each Expeditionary Contracting Squadron. Using this data, models were developed that showed potential reductions in deployed CCOs if GPC actions were sent from USAFCENT area of responsibility to a stateside reachback cell.

The study provides recommendations based on the potential reductions of deployed CCOs. One such recommendation is to stand up a test reachback cell. This cell will employ the recommended number of personnel developed by the models in this project.



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LIST OF ACRONYMS AND ABBREVIATIONS

A7/K	USAFCENT Contracting Office
AAR	After Action Report
AB	Air Base
ACC	Army Contracting Command
AEG	Air Expeditionary Group
AEW	Air Expeditionary Wing
AF	Air Force
AFB	Air Force Base
AFCESA	Air Force Civil Engineer Support Agency
AFFOR	Air Force Forward
AOR	Area of Responsibility
APDP	Acquisition Professional Development Program
APO	Army Post Office
AUAB	Al-Udeid Air Base
BPA	Blanket Purchase Agreement
CAOC	Combined Air Operations Center
CCO	Contingency Contracting Officer
COCOM	Combatant Commander
CONPLAN	Contingency Plan
CONUS	Continental United States
COR	Contracting Officer Representative
CSIP	Contract Support Integration Plan
DCCH	Defense Contingency Contracting Handbook
DCGS	Distributed Common Ground System
DCMA	Defense Contract Management Agency
DoD	Department of Defense
EASE	Electronic Acquisition Services Environment
ECONS	Expeditionary Contracting Squadron
EFT	Electronic Acquisition Services Environment
EMSG	Expeditionary Mission Support Group
EOB	Enduring Operating Base
ESS	Expeditionary Support Squadron
FAR	Federal Acquisition Regulation
FOB	Forward Operating Base
FSS	Federal Supply Squadron
FY	Fiscal Year
GPC	Government Purchase Card
GSA	General Services Administration
HCA	Head of Contracting Activity
HTS	Human Terrain System
IDIQ	Indefinite Delivery Indefinite Quantity
IPE	Integrated Planner and Executor



IRB	Institutional Review Board
JCC-I/A	Joint Contracting Command–Iraq/Afghanistan
JCCS	Joint Contingency Contracting System
JTSCC	Joint Theater Support Contracting Command
LCO	Leveraging Contracting Officer
MAC	Multiple-Award Contract
MAJCOM	Major Command
MRAP	Mine Resistant Ambush Protected
NCO	Non-Commissioned Officer
OEF	Operation Enduring Freedom
OIF	Operation Iraqi Freedom
OPLAN	Operations Plan
OPM–SANG	Office of Personnel Management–Saudi Arabian National Guard
PMA	Procurement Management Assessment
PR	Purchase Request
QAE	Quality Assurance Evaluator
RCO	Regional Contracting Office
RICC	Rock Island Contracting Center
RPA	Remotely Piloted Aircraft
RRC	Reachback Research Center
SAF/AQC	Assistant Secretary of the Air Force— Acquisition
SAT	Simplified Acquisition Threshold
SOW	Statement of Work
TSCC	Theater Security Cooperation Cell
U.S.	United States
USAFCENT	United States Air Forces Central
USTRANSCOM	United States Transportation Command
VTC	Video Teleconference



EXECUTIVE SUMMARY

This paper analyzes the viability of performing United States Air Forces Central (USAFCENT) government purchase card (GPC) purchases utilizing a stateside reachback cell. Centralizing GPC purchases at a stateside reachback cell reduces the deployment burden on the contracting career field, increases the deployment pool by utilizing contracting officers deemed ineligible to deploy, and gains efficiencies by requiring fewer personnel to do the same amount of work. Through analysis of USAFCENT FY 2011 data, this study determined that with implementation of a stateside reachback cell, current contingency contracting officer (CCO) manning can be reduced anywhere from 9.3% to 42.33% based on the number of GPC actions sent to the reachback cell.

This study first recommends that USAFCENT establish a reachback test cell for one full year in order put the theory into practice. By creating a test cell, efficiencies, best practices, proper funding, and appropriate manning can be analyzed. Second, reachback capabilities should be included in current operations and future contingency plans. Approaching reachback with a strategic mindset allows the best utilization of personnel and resources for the combatant commander.



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I. INTRODUCTION

A. INTRODUCTION

The purpose of this chapter is to provide the reader with an overview of the layout of our research. In Section B, we provide background information related to our research; specifically, we define the concept of reachback and identify the status of U.S. Air Forces Central (USAFCENT) contracting. In Section C, we describe our purpose and the applicability of alternative methods to supporting contingency contracting efforts. In Section D, we present the significance of our research in terms of its deeper effects on Air Force (AF) leadership, personnel, and families. In Section F, we use research questions to present a guideline for how we conducted our study; in Section E, we provide a roadmap of our methodology and our report.

B. BACKGROUND

The concept of reachback support for military operations is not a new idea. In a military supply-chain system, receiving supplies and services from the location closest to the warfighter is not always the best method. The quality of these supplies and services could dramatically change from one country to the next, and these quality concerns could have a serious impact on the wellness and safety of the warfighter. Reachback support provides a method to obtain supplies and services from suppliers and vendors closest to the originating location of the supply chain, which is usually in the contiguous United States.

USAFCENT, based out of Shaw Air Force Base (AFB), Sumter, South Carolina, currently provides supplies and services for operations in 20 countries (U.S. Air Forces Central Command, 2011). An important cog in this supply chain is the contingency



contracting officer (CCO). The CCO is responsible for researching and purchasing supplies and services to support these operations, while also acting as a steward of U.S. taxpayers' dollars. The CCO must make critical decisions on whether to purchase locally (i.e., where the operation is currently taking place) or to purchase back in the U.S. CCOs must also decide whether they should purchase a quality product with a longer delivery time or a shoddy product with quick delivery in order to support the mission. One of the tools CCOs have to aid them in purchasing is the government purchase card (GPC). The GPC allows a CCO to purchase supplies and services up to \$30,000 in a declared contingency environment or up to \$15,000 from stateside vendors (FAR, 2011, § 2.101). In our research, we collected data on the percentage of GPC purchases CCOs made locally versus stateside. We explain this data further in Chapter IV, but it is important to realize that CCOs use the GPC heavily to purchase supplies from the U.S.

C. PURPOSE

The purpose of our research is to present the applicability of alternatives to deploying CCOs to the area of responsibility (AOR) that will still accomplish the AOR's mission. AF contracting is considered a critical skilled career field, and retention levels are not on par with overall AF retention levels (*Department of the Air Force Presentation*, 2011). AF CCOs deploy for anywhere from a 1:1 dwell to a 1:4 dwell. A 1:1 dwell means that CCOs are home for six months and then deployed for six months, and so on. A 1:4 dwell means that CCOs are home for two years and then deployed for six months. The majority of the enlisted force operates at a 1:1 dwell (Correll, 2010). As mentioned in Section A, CCOs use the GPC to make purchases from stateside locations. From the perspective of a supply-chain model, we can ask, why is there a need for a CCO to make stateside purchases from a



forward deployed location? Using a reachback concept, the AOR could send requirements to a contracting officer in the U.S., who could make the purchase and arrange for delivery of the item to the AOR. This reachback support could potentially save AF human assets from deploying.

D. SIGNIFICANCE OF RESEARCH

As of October 3, 2011, 57 CCOs were deployed to the USAFCENT AOR. These CCOs, both officers and enlisted personnel, are pulled from bases all over the U.S., Europe, and Japan for 179 days. These 179-day deployments have deeper effects that go beyond negative efficiency on the supply-chain process. When a CCO deploys to the AOR, a void is left at the CCO's home station, where commanders and civilian leaders must make organizational decisions regarding workload distribution. Experienced workers are usually burdened with heavier workloads, which results in inadequate training time for inexperienced workers (e.g., junior officers and enlisted personnel, enlisted cross-trainees, and civilian interns). In addition to the burden placed on home-station personnel, the emotional element of a deployment must be considered. Families suffer when the CCO is away from home for 179 days. The tour lengths and lack of respite from the deployment cycle eventually take a toll and, to avoid further deployments, experienced officers and enlisted personnel choose either to separate from the AF or to retire. Along with inadequate training and emotional burdens, deploying CCOs to the AOR also has significant costs associated with training, equipping, and transporting personnel.



E. RESEARCH QUESTIONS

The primary research question of this study is as follows: What is the reachback viability for USAFCENT GPC purchases? From this primary question, we developed secondary questions to assist us in determining the viability of reachback methods:

1. Is the U.S. military currently employing reachback for contingencies?
2. What percentage of GPC purchases in the AOR are provided by U.S. vendors and suppliers?
3. What are the advantages and disadvantages of reachback?
4. What would a USAFCENT personnel reduction model look like?

F. METHODOLOGY

In Chapter I, we introduce our study by providing its purpose, underlying research questions, and significance.

In Chapter II, we provide extensive background information and an in-depth literature review on the concept of reachback; this includes a brief look at current reachback support for the four branches of the U.S. military. We then analyze and critique the 2011 RAND Corporation report *Air Force Contingency Contracting: Reachback and Other Opportunities for Improvement* (Ausink, Castaneda, & Chenoweth, 2011). We conclude Chapter II by discussing the advantages and disadvantages of reachback and by analyzing contracting officers' general concerns about this concept. Our intent is to look at both sides of this issue because our support of reachback might draw criticism from skeptics who believe reachback will cause commanders in the AOR to lose control of and accountability for the supply chain.

After we present our literature review, we focus Chapter III on presenting data and current metrics from the USAFCENT contracting offices. Through several graphs, we



display total contract actions, dollars obligated, GPC dollars obligated, and U.S. dollars obligated. We also look at the current USAFCENT organizational structure and the differences between operational and functional chains of command.

In Chapter IV, we first provide an interpretation of the data presented in Chapter III. This includes the methodology we used to calculate the workload ratios that led to the development of our models. Next, we discuss the assumptions and constraints that must be considered before making any conclusions based on the models. Finally, we present potential reduction models using 25%, 50%, and 75% GPC action reductions. Our intent is to support answers to only our primary research question: Is reachback viable for GPC purchases? We do not make any recommendations on how to change the current USAFCENT organizational structure.

In Chapter V, we provide our overall conclusion regarding the viability of GPC reachback. Before using resources to create a reachback cell, USAFCENT leaders must consider leadership and management issues, along with any relevant research (e.g., this project or the RAND Corporation report). We provide recommendations for further research on the subject. For example, the AF provides the majority of its CCOs to the Joint Theater Support Contracting Command (JTSCC) in Iraq and Afghanistan. Future research can determine whether reachback support can help eventually reduce the number of CCOs in theater.

G. SUMMARY

In Chapter I, we provided a basic roadmap for our study and for the topics we examine in each chapter of our study. The background section identified what reachback is and how the CCO functions in the supply-chain model. In the purpose section, we identified



why we conducted the current research and its significance. In the research section, we described the deeper effects of conducting reachback support—for example, home-station void, family issues, and costs. The research questions we outlined guided our study. In the methodology section, we described the layout of the different chapters of this thesis. In the next chapter, we discuss the background on reachback and present a literature review.



II. BACKGROUND AND LITERATURE REVIEW

A. INTRODUCTION

Our purpose in this chapter is to provide a greater understanding of reachback, analyze how current reachback initiatives assist Department of Defense (DoD) operations, and discuss the advantages and disadvantages of reachback, along with common concerns regarding reachback support. We begin the chapter with a brief history of U.S. government reachback support. This history does not necessarily pertain to military operations, but rather to any form of reachback support. Next, we look at current DoD reachback initiatives, such as the Army Contracting Command (ACC) Reachback Division in Rock Island, Illinois. Then we analyze the RAND Corporation's report (Ausink, Castaneda, & Chenoweth, 2011), on AF contingency contracting reachback. This report is the most thorough research done to date on the subject of contingency contracting reachback. After discussing the RAND Corporation's report, we break down the four phases of contingency contracting, the Phase Zero concept, and reachback support's role in assisting in these phases. Finally, we present the advantages and disadvantages of contracting reachback support. These advantages and disadvantages cover a broad range of ideas and concepts, such as decentralization, strategic purchasing, leadership and control issues, and hours of operation.

B. U.S. GOVERNMENT REACHBACK SUPPORT

1. Department of Defense

Only one document at the DoD level addresses reachback. *Operational Contract Support* (JP 4-10; U.S. Joint Forces Command, 2008) establishes doctrine for planning, conducting, and assessing operational contract support integration and contractor



management functions in support of joint operations. This publication (U.S. Joint Forces Command, 2008) provides standardized guidance and information related to integrating operational contract support and contractor management; defines and describes these two different, but directly related, functions; and provides a basic discussion of contracting command and control organizational options; however, it is only applicable to contingency operations.

There are four instances of the word *reachback* in the document. The first mention states that the Army has reachback capability, but this mention does not provide any additional information about the Army's use of this capability. The next three mentions appear as checklist questions pertaining to legal and contracting reachback.

JP 4-10 does not specifically call for a reachback cell to be established by any Service or joint effort. It focuses on questions leaders should answer while planning but mentions nothing about implementation (U.S. Joint Forces Command, 2008). This document provided no relevant information for our research.

2. Military Branches

The Navy does not employ the reachback concept in its deployment procurement. It uses existing husbandry contracts that are set up at existing ports to supply the goods and services it needs.

The Marines employ reachback based on the region in which a deployed unit is stationed. Each home-station Marine unit is supported by a regional contracting organization (RCO). When the unit deploys, the same RCO supports it for commodities and services that it cannot contract for in the deployed environment.



Currently, the AF does not perform any contingency contracting reachback specific for USAFCENT personnel. It does supply personnel who work at the Rock Island Arsenal, but these personnel fall under JTSCC and not under USAFCENT.

The Army employs reachback from the Rock Island Contracting Center (RICC), located on Rock Island Arsenal, Illinois. The division currently has “four branches handling Afghanistan, Iraq, Kuwait and Qatar, and transportation” (Adrian, 2010). The reachback division was activated in 2007 to support the 408th Contracting Support Brigade, the deployed brigade in Kuwait. In 2008, the division entered into a memorandum of agreement to supply contracting support to U.S. Central Command’s JTSCC.

3. Joint Commands

JTSCC, which employs CCOs from all military Services, currently receives contracting reachback support from Rock Island Arsenal, Illinois. The reachback center is currently divided into two different sections: complex and non-complex. The mission of the reachback support program is to have personnel contract standard procurements with vendors based primarily in the U.S. This frees deployed contracting personnel to work directly with deployed warfighters to award requirements in the AOR (Berns, 2010). The contingency contracting officers in theater award contracts mainly from the host nation and other vendors as required.

The difference between the two sections is based on the dollar amount only. The non-complex section is responsible for stateside commodities in the range of \$1 to \$6.5 million. If the commodity can be bought using the procedures in the Federal Acquisition Regulation (FAR, 2011) part 13.500, the maximum amount increases to \$12 million.



Anything over \$6.5 million (or \$12 million for commodities under FAR part 13.500) is executed by the complex section.

4. Other Reachback Initiatives

The concept of reachback is not unique to contracting alone. Other organizations perform their own type of reachback under different names, but the concept is the same.

a. Air Force Distributed Common Ground System

The AF Distributed Common Ground System (DCGS) is a series of five interconnected clearinghouses of intelligence, surveillance, and reconnaissance. These clearinghouses practice a form of reachback. Information gathered in the AOR is transmitted electronically to ground stations located in the U.S. The information, raw or processed, is then sent to commanders in the field (Tirpak, 2009).

b. Army Human Terrain System

The Army Human Terrain System (HTS; The Reachback Research Center, n.d.) is an initiative to provide socio-cultural teams to deployed units that help the units understand the local population and use that understanding in the military decision-making process. The majority of these initiatives are done in the deployed environment but are supported by the two Reachback Research Center (RRC) cells located in Fort Leavenworth, Kansas, and Newport News, Virginia. These cells enable supported commanders to access additional analysts who have a wide body of academic knowledge. By design, the RRC is an extension of the deployed teams. Key to this support concept are close coordination and collaboration regarding the development of requests for research.



C. ANALYSIS OF RAND REPORT ON AIR FORCE CONTRACTING REACHBACK SUPPORT

1. Background of Study

In 2008, the Office of the Deputy Assistant Secretary of the Air Force for Contracting (SAF/AQC) asked the RAND Corporation (Ausink et al., 2011) to perform a study examining reachback capabilities. The main objective of their research was to determine whether reachback services could alleviate the deployment stress on the contracting career field, which had just gone to a 1:1 dwell in response to an SAF/AQC memo (Correll, 2008). The final report, published in 2011, is currently the most comprehensive study done on the subject of reachback (Ausink et al., 2011).

In their approach to the study, the RAND researchers (Ausink et al., 2011) first utilized nine years' worth of CCO after-action reports (AARs) in order to learn what CCOs actually do in theater. Second, they conducted a series of focus groups in which they interviewed recently deployed CCOs, civilian and military leaders, and members of contracting organizations that have used reachback services. Finally, they analyzed data from the Joint Contingency Contracting System (JCCS), which is the system Joint Contracting Command–Iraq/Afghanistan (JCC–I/A) used to capture spend metrics for Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). The data were used in determining reachback impact on different categories of purchases (e.g., commodities, services, construction, and various dollar thresholds; Ausink et al., 2011).

2. Results of the Study

After the intensive study, the RAND researchers (Ausink et al., 2011) concluded that CCO challenges can be mitigated through reachback services; however, their



conclusions called mostly for changes to procedures and policies. They identified five challenges and provided recommendations for each (see Table 1).

The RAND researchers (Ausink et al., 2011) determined that reachback has potential but only provided two overall recommendations for the AF. First, they recommended that the AF refine purchase categories because they believed that much of the data overlapped various categories. This recommendation is important in determining whether the purchase was made during the buildup or the sustainment phase. The RAND researchers (Ausink et al., 2011) suggested that reachback has the most potential during the sustainment phase. Their second recommendation was that the AF analyze the experiences of former and current reachback organizations, primarily the JTSCC reachback cell in Rock Island, Illinois.



Table 1. Challenges and Recommendations for Contracting Procedures From RAND Researchers

Challenge	Recommendation
1) Facilitating better requirements and Statement of Work (SOW) development. Inexperienced customers in theater do not know how to write SOWs or requirements, and CCOs end up carrying the burden.	Create a 24-hour help desk to assist customers in developing SOWs and requirements in conjunction with the JCC Handbook appendix for SOW checklist and templates. Service would be similar to the Air Force Civil Engineer Support Agency (AFCESA) civil-engineer hotline
2) Consolidating requirements into fewer contracts. Most contracts written in fiscal year 2008 were single-use purchase orders.	Create a theater-wide database of contracts for CCOs. They can use this database to see what contracts have already been awarded for similar purchases. Basically, more theater-wide Blanket Purchase Agreements (BPAs) and Indefinite Delivery Indefinite Quantity (IDIQ) contracts should be created for consolidating requirements
3) Revising deployment policies. RAND focus groups stated that many of the contracting duties are mundane tasks that prevent experienced CCOs from doing “big” contracts.	Allow low-grade personnel and other career fields, such as 63A Program Managers, to handle positions where tasks do not require a warrant. This increases the deployment pool. Also consider allowing DoD civilians to deploy to low-threat areas.
4) Reviewing personnel allocations and revising as needed. Some offices have too few personnel and some have too many. Some offices have sections with too many inexperienced people compared to sister sections.	Create a tracking tool that analyzes CCO workload metrics. Personnel allocation can be managed using this tool. Also, negotiate with other Services to provide more bodies for joint positions.
5) Clarifying the roles of other personnel in the contracting process. CCOs can spend time doing tasks outside their responsibilities when these tasks have been assigned to Contracting Officer Representatives (CORs) and Quality Assurance Evaluators (QAEs).	Training should be provided to the customers on what the roles and responsibilities are for administering a contract. Properly trained or experienced customers should serve as CORs or QAEs.

Note. We created this table using information found in the RAND research report (Ausink et al., 2011).



3. Suggested Future Research

The RAND researchers (Ausink et al., 2011) proposed five areas in which further research could be done because these topics were out of their project's scope.

a. Joint and Command and Control Issues

The RAND researchers (Ausink et al., 2011) stated that more than 70% of the AF CCOs are currently in joint billets. As of September 1, 2011, that number had dropped to 53% due to the drawdown in Iraq and the increased support of the ACC providing qualified Army CCOs. In the RAND focus group panels, members stated that it was important for the commander to know that the CCO worked for him or her. We came across similar command and control issues as part of the 2011 USAFCENT Procurement Management Assessment (PMA) team. According to the 2011 USAFCENT PMA report (Benivegna, Ackiss, Balaji, & Michael, 2011), commanders of the various expeditionary contracting squadrons (ECONS) stated that they answer to the Air Expeditionary Wing (AEW) Commander, but they wondered to whom the reachback cell would answer. Because our project deals only with USAFCENT GPC purchases, we address our solutions to these command and control questions. We do not address the joint billet capabilities because our project scope is limited to USAFCENT.

b. Policy Issues

The RAND researchers (Ausink et al., 2011) stated that certain dollar thresholds apply to overseas contingency purchases versus normal stateside purchases. Would the reachback cell be subject to overseas contingency thresholds or stateside



thresholds? Table 2 states the current thresholds according to FAR (2011) parts 2.101, 13.201, and 13.500.

Table 2. Contracting Thresholds

Description	Normal circumstances	Contingency purchase performed or awarded within the U.S.	Contingency purchase performed or awarded outside the U.S.
Micro-purchase threshold	<ul style="list-style-type: none"> Services Construction 	<ul style="list-style-type: none"> \$3,000 \$2,500 \$3,000 	<ul style="list-style-type: none"> \$15,000 \$15,000 \$3,000 or \$15,000¹
Simplified Acquisition Threshold (SAT)	\$150,000	\$300,000	\$1,000,000
Test program for certain commercial items	\$6,500,000	\$12,000,000	\$12,000,000

Note. We developed this table using information from FAR (2011) part 2.101.

Currently, there is much debate, even in theater, on which thresholds are applicable to certain acquisitions. If a CCO deployed to Qatar makes a micro-purchase with a stateside vendor, is the threshold \$15,000 or \$30,000? An argument could be made that because the dollars obligated are going to a stateside vendor, the threshold is \$15,000. Another argument is that the physical action of awarding the contract is done in a foreign contingency operation, so the threshold should be \$30,000.

JTSCC has implemented a policy that deals with this situation and could prove useful for a similar USAFCENT model. All requirements of \$15,000 and below (i.e., the stateside contingency micro-purchase threshold) are vetted through a reachback cell

¹ If the purchase is subject to the Davis Bacon Act, then the micro purchase threshold for stateside contingency is \$3,000.



liaison assigned to Iraq and Afghanistan. The reachback cell in Illinois, which has declared contingency obligation authority, completes the purchase order unless it deems that the purchase can be made in Iraq or Afghanistan. We review this model in greater detail in Chapter IV, along with our recommendations of what the USAFCENT reachback model should look like.

c. Collateral Impact

The RAND researchers (Ausink et al., 2011) questioned how using reachback cells would affect the training and development of contracting officers. They asked whether the reachback cell should have only experienced personnel with previous deployment experience. The small-dollar acquisition branch of the RICC currently employs C-coded AF assets. These are personnel who are unable to deploy due to medical reasons. The current experience levels range from Acquisition Professional Development Program (APDP) Level III captains (O3s) and AF 7-Level non-commissioned officers (NCOs; E5-E7s) to brand new airmen fresh from tech school. Because our project is limited to GPC purchases, this type of acquisition is low-density and doesn't require the experience level a major source selection would.

d. Reachback Cell Location and Personnel Pool

The RAND researchers (Ausink et al., 2011) addressed the challenge of having multiple reachback cells and identifying locations for those cells. The current JTSCC reachback cell in Illinois only supports JTSCC contracts. Our scope is focused only on USAFCENT contracting, and we present a model of our reachback cell in Chapter IV. In the USAFCENT PMA report (Benivegna et al., 2011), CCOs voiced concerns that the reachback



cell would be disconnected from the deployed troops and asked what the working hours would look like.

e. Resources

Resources are one of the main concerns when a new military organization is created. What equipment is needed? How much building space is required? What will the communications capability be? Currently, the JTSCC reachback cell uses the same database as all the RCCs in Iraq and Afghanistan. The database keeps them up to date on requirements and allows in-theater users to see the status of their purchase orders. Similarly, USAFCENT is moving all the ECONSSs to a new online contracting writing tool called Electronic Acquisition Services Environment (EASE). This software will allow a reachback cell located anywhere in the world to communicate freely with CCOs in theater.

D. PHASES OF CONTINGENCY CONTRACTING

To better understand how reachback could work and when its planning should occur, we first analyze the four contingency contracting support phases (Figure 1), as described by the *Defense Contingency Contracting Handbook (DCCH; Yoder et al., 2010)*.



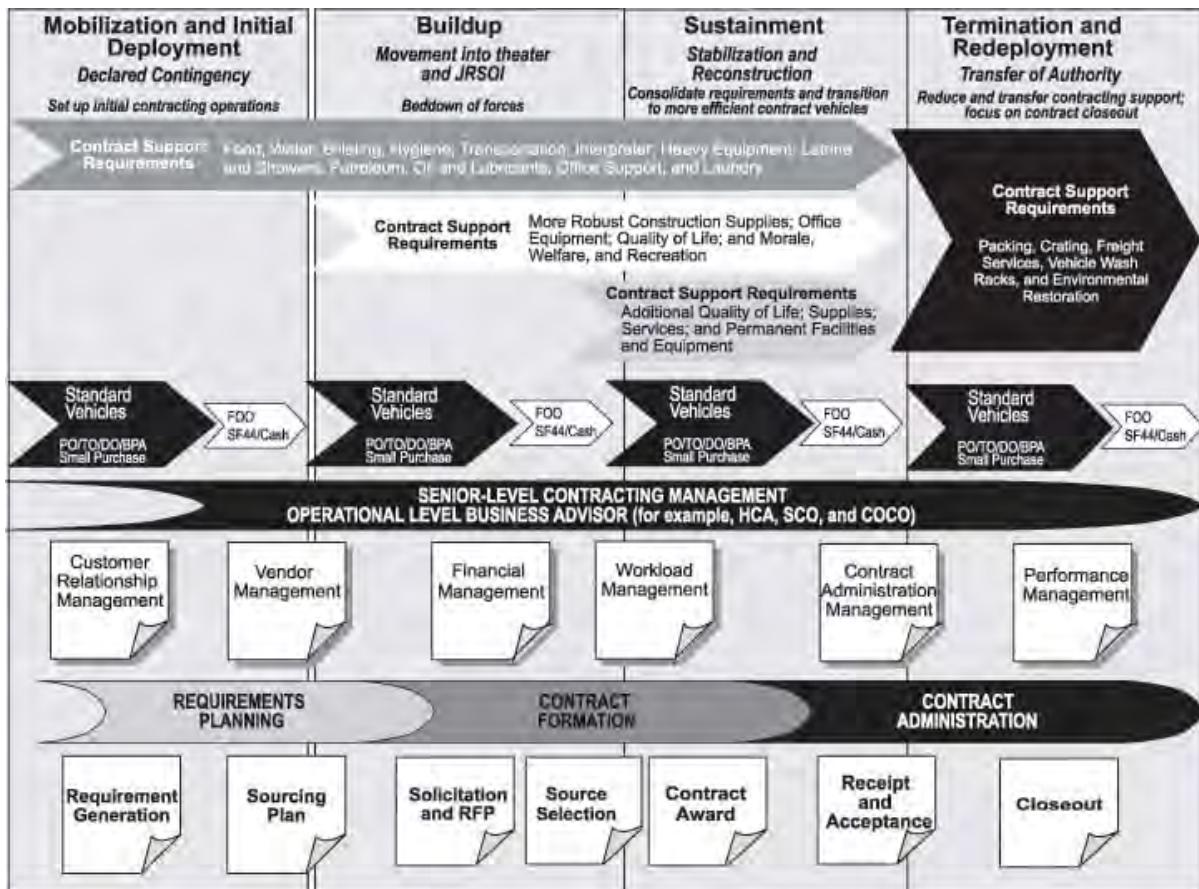


Figure 1. Phases of Contingency Contracting
(Yoder et al., 2010)

1. Phase 1: Mobilization and Initial Deployment

As discussed in the *DCCH*, Phase 1 is intended to last through the first 30–45 days of the deployment. This period includes extremely high operations tempo, confusion, and controlled chaos (Yoder et al., 2010). This is where CCOs spend the majority of their time procuring items necessary to build an effective contracting office for the mass influx of requirements from other units. CCOs must also develop a priority list with the mission commander for the most essential items necessary to support the troops on the ground. Every unit will declare that their requirements are mission critical, so it is imperative for the CCO to make this priority list with the mission commander. Typically, the top priority is



contracting for basic life-support services for the troops (Yoder et al., 2010). The CCO must also start developing relationships with support agencies, such as the embassy, qualified and competent contractors, the Defense Contract Management Agency (DCMA), and local interpreters. CORs from each unit must be assigned so that once contracts are in place, the CCO need not spend time doing quality assurance surveillance on the contractor (Yoder et al., 2010).

The majority of Phase 1 is planned while on the home station and then executed once the unit hits the ground in the deployed theater. This phase does not have much need for reachback services because of the “fog-of-war” element unique to each deployed location. Only CCOs who have adequate communication capabilities should call their stateside contracting units for advice. Ideally, a qualified Tier 2 CCO as described by the Yoder Three-Tier model (Yoder, 2004) should support Phase 1 tasks. Qualified Tier 2 CCOs are considered to be senior enlisted personnel, mid-to-junior grade officers, and GS-11+ 1102 civilians, all with APDP Level I or II certification. These individuals should be able to fulfill the Phase 1 tasks without the assistance of reachback services.

2. Phase 2: Joint Reception, Staging, Onward Movement, and Integration

Phase 2 (better known as the buildup phase) is characterized by the reception and bed-down of the main body of deploying forces (Yoder et al., 2010). CCOs generally begin receiving additional contracting personnel to assist with requirements, and qualified CORs may arrive from other units to assist with contract quality assurance. Basic life-support requirements are still the top priority, but the CCO must start planning to support command and control procedures. CCOs establish methods for units to submit requirements, create a formal purchase request (PR) approval process in conjunction with the finance unit,



and start attending all meetings in which contracting or business advice is needed. BPAs are critical in this stage because units start submitting recurring requirements, and CCOs need a contract vehicle capable of supporting high-demand items.

Reachback during this phase may also be impractical due to the high operations tempo. CCOs still have to manage the chaos while continuing to train units on the contracting procedures. Depending on the additional contracting personnel who come during Phase 2, more experienced CCOs may have to train the less experienced CCOs, such as Tier 1 CCOs, as defined in the Yoder Three-Tier Model (Yoder, 2004). If adequate communications, such as e-mail and phone, are established, as well as an Army Post Office (APO) postal address, CCOs may seek assistance from home-station contracting units for purchasing requirements available only in the U.S. Home-station units can also conduct market research and help coordinate shipping and delivery with stateside vendors. However, reachback services should not be relied on during Phase 2.

3. Phase 3: Sustainment

The *DCCH* considers Phase 3 to be the period when contracting support is needed from the end of buildup until the redeployment of forces begins (Yoder et al., 2010). According to the definition in the *DCCH*, the current state of USAFCENT contracting operations in Southwest Asia is considered to be in Phase 3. The contracting mission now focuses on supporting combat operations, stability and reconstruction operations, and sustainment operations. During this phase, forward operating bases (FOBs) or enduring operating bases (EOBs) tend to resemble the similar command structure of home-station bases. Within the USAFCENT AOR, EOBs and FOBs have the typical wing-group-squadron command chart, and all units have fully operational buildings or designated areas



complete with communications, security, engineering, contracting, and services support. Supply and logistics chains between the U.S. and the AOR become more efficient every day. During this phase, the CCOs shift focus and become business advisors for the wing or base commander and help make the supply chain even more efficient. CCOs must begin to achieve cost reductions through competition or by establishing long-term contracts, such as IDIQ contracts. The *DCCH* suggests that CCOs begin achieving economies of scale by consolidating requirements where possible and mitigating government risk on contracts (Yoder et al., 2010). CCOs rotate in and out of the AOR in this phase, so accurate and up-to-date continuity of past, current, and future contracts is critical for the success of contracting support. As stated earlier, CCOs should treat Phase 3 activities as similar to home-station activities, only with a higher operations tempo.

Phase 3 is the perfect time to implement reachback strategies, especially in a mature theater such as Qatar, Kuwait, or the United Arab Emirates. As we show in Chapter III, many of the requirements during Phase 3 are purchases at or below the SAT. CCOs can minimize their workload and stress levels by vetting these requirements back to a reachback cell that has the contracting know-how to effectively and efficiently purchase these requirements. CCO deployments are much more important during Phase 1 and 2 operations, when compared to Phase 3, during which reachback becomes more of an option (Ausink et al., 2011). During Phase 3 operations, Tier 1 and Tier 2 CCOs can be utilized based on the complexity of the requirements (Yoder, 2004). Tier 1 CCOs can easily do the micro-purchases and GPC-type purchasing in a reachback cell rather than in a deployed theater, where Tier 2 CCOs can focus on the role of business advisor and gaining cost reductions and



efficiencies. Once a Tier 1 CCO gains adequate training and experience and moves into Tier 2, then he or she can deploy to the AOR as a business advisor.

4. Phase 4: Termination and Redeployment

Phase 4 is defined by significant pressure and urgency to send the troops home (Yoder et al., 2010). The 2011 drawdown in Iraq can be categorized as a Phase 4 operation. New logistical requirements, such as packing, crating and freight services, and air transportation for troops, go through the contracting office (if U.S. Transportation Command [USTRANSCOM] is not providing this service; Yoder et al., 2010). The CCO's focus shifts mainly to the responsibility of terminating existing contracts and of closing out and staging expired contracts. During this time, contractors may begin submitting claims for unsettled invoices, and this falls under the purview of the CCO. The CCO must also ensure that life-support services are in place until the last troop leaves the theater. CCOs can expect amounts of controlled chaos similar to Phase 1, especially when attempting to recover completed materiel receiving reports from end users.

Reachback services can be used for closeout and claims procedures. During Phase 3, contract closeouts should be an ongoing responsibility of the CCO; but if the CCO does not have the time to perform such tasks, closeout duties can be delegated to Tier 1-type CCOs in a reachback cell. Once the declared contingency is over and all troops—including the CCO—have left the theater, a reachback cell can assume the responsibility for handling any claims made by contractors, payments on overdue invoices, and the staging of closed-out contracts.



5. Yoder Phase Zero Operations: Planning and Exercise Cycle

Contingency contracting should be an integral part of pre-deployment planning and should be included in the combatant commander's (COCOM) strategic operations plan (OPLAN; Yoder, 2004). Yoder theorized the Phase Zero concept as a precursor to the existing four phases the *DCCH* detailed. In his report *Phase Zero Operations for Contingency and Expeditionary Contracting: Keys to Fully Integrating Contracting into Operational Planning and Execution*, Yoder (2010) recommended that Congress establish and fund Tier 3 Integrated Planner and Executer (IPE) billets and positions within each unified combatant command and military Service component. Once the IPE position is funded, Congress must develop a strategic-level contract support integration plan (CSIP) for all OPLAN and contingency plans (CONPLAN). The purpose of the CSIP is to give contracting a seat at the strategic-level table. Yoder also recommended that Phase Zero IDIQ and multiple-award contracts (MACs) be established so that when the troops deploy, requirements can be procured with greater effectiveness and efficiency (Yoder, 2010).

A reachback cell could benefit this stage by establishing the MAC and IDIQ contracts specific to certain regions of the world where contingencies could occur. The reachback cell would conduct all market research necessary to gain an understanding of the supply-chain characteristics of each region (e.g., vendor base, shipping methods, security, etc.). Once the contingency is declared and Phase 1 operations begin, the reachback cell can provide a Tier 2 CCO (as defined by Yoder, 2004) to procure the appropriate requirements and uphold the policies set forth by the IPE and COCOM. Once the contingency matures into Phase 3 operations, the reachback cell can provide additional support for sustainment.



E. ADVANTAGES OF REACHBACK SUPPORT

Army Major John M. Neal (2000) defined reachback as “the electronic ability to exploit organic and non-organic resources, capabilities and expertise, which by design are not located in theater” (p. 39). Reachback provides commanders and leaders in theater with another tool to effectively complete the mission while reducing the risk of losing human and non-human assets.

Reachback enhances the operational agility of the deployed unit by improving its access to timely and relevant information. ... Telemedicine, the ability of remote doctors to consult specialists electronically, is a striking example of self-directed reachback. Soon many units will have the ability to conduct similar self-directed reachback through their organic information systems. (Neal, 2000, p. 39)

With the emergence of telecommunication resources such as e-mail, video-teleconferencing (VTC), and Internet, commanders can increase the span of their control to areas of the globe well beyond their physical location. In fact, with the resources currently owned by the AF and military as a whole, reachback support can be achieved without the procurement of additional technologies.

Reachback is a way to centralize the execution of requirements and still achieve the commander’s vision. One advantage of centralized execution is the uniformity of activities and effective control (MBA Knowledge Base, 2010). In a contracting reachback scheme, requirements from the theater would be sent by the ECONS to a reachback cell as shown in Figure 2. The reachback cell would now have the decision-making authority on how best to procure the requirement (e.g., full and open competition, small business set-aside, sole source, or GPC). These requirements would be purchased in a uniform manner since the CCOs at a reachback cell would be standardized in their training. The reachback cell would also have one person in charge to ensure that requirements are purchased properly and



uniformly. Another advantage of centralization is economies of scale, which reduces duplication of work (MBA Knowledge Base, 2010). CCOs at a reachback cell could share their knowledge of requirements from all the USAFCENT contracting offices and determine what supplies are bought frequently. The CCOs could then set up BPAs and IDIQ contracts to gain cost savings.

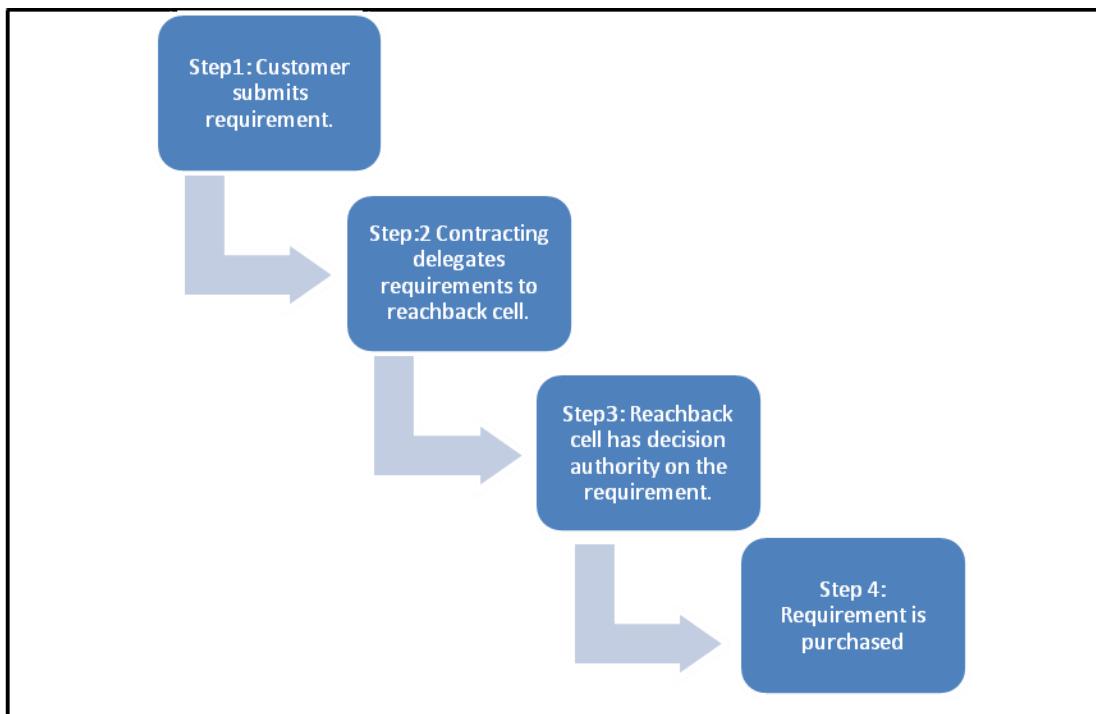


Figure 2. Reachback Requirements Flow Chart

For USAFCENT GPC purchases, centralization of Tier 1-level work (as defined by Yoder, 2004) will allow Tier 2 personnel in theater to focus on developing relationships with host-nation vendors. According to Yoder's model, Tier 2, also known as leveraging contracting officers (LCOs), should engage with local and regional businesses. "This level . . . includes leveraging the capacities and



capabilities of the local and regional economies in the contingent theater” (Yoder, 2004, p. 14).

Developing local economies is integral to contracting’s mission, and once a contingency has reached Phase 3 (Sustainment), CCOs should not have to waste valuable man-hours procuring supplies from stateside vendors. Decentralizing purchases not critical to the development of local economies can optimize the supply chain by allowing CCOs, at both ends of the chain, to interact and procure from geographically closer vendors.

A second advantage to reachback is the concept of strategic purchasing or sourcing. Strategic sourcing involves a firm’s decision to take a strategic approach to the selection of suppliers (Rendon, 2005). According to Peter Kraljic (1983), sourcing strategies classify purchases by assessing the supply position in order to reduce supply weaknesses and efficiently use a company’s buying leverage. Currently, USAFCENT contracting offices form a tactical buying unit where multiple personnel focus on short-term, one-time buys. These CCOs do not coordinate strategically to potentially save the AF taxpayer dollars. A reachback cell can analyze the purchases made by all eight USAFCENT contracting offices and determine which similar products are consistently purchased across theater. CCOs at a reachback cell would have intimate market knowledge of stateside vendors. In addition, operating at a strategic level “inverts” tactical buying into strategic sourcing, as shown in Figure 3 (Moore, Baldwin, Camm, & Cook, 2002).





Figure 3. Strategic Model
(Moore et al., 2002)

Once these trends are discovered, the reachback cell can leverage its power as a buyer and achieve cost savings by making bulk purchase orders (Porter, 2008). According to the joint applied MBA project called *The Need for a Strategic Approach to Contingency Contracting* (D'Angelo, Houglan, & Ruckwardt, 2007), thorough spend-analyses must integrate the Services' network of supply chains with the geographical area, thus identifying areas in which to capture more value. Unless the commanders from each USAFCENT contracting office coordinate and share their spend-data, it will be impossible to leverage buying power.

Finally, one of the most important advantages for reachback is the reduction in deployed troops. The RAND Corporation sponsored an analysis by Ausink et al. (2011) that used spend-data from Joint Contracting Command (now JTSCC) and developed a potential



reduction of deployed AF CCOs based on fiscal year (FY) 2008 data (see Figure 4).

According to RAND researchers (Ausink et al., 2011), 11 personnel could be reduced from the deployment pool based on the number of GPC actions in 2008.

Type	Contracts over \$1M	GPC	GSA/FSS	Commodity	Commodity (nonlocal provider)	Service (nonlocal provider)	Construction (nonlocal provider)
Contracts (% of total)	649 (2%)	1,666 (6%)	1,594 (6%)	19,195 (73%)	9,832 (37%)	987 (4%)	337 (1%)
Actions (% of total)	6,406 (15%)	1,754 (4%)	1,912 (5%)	26,244 (63%)	12,028 (29%)	3292 (8%)	706 (2%)
Dollars (% of total)	\$5.944B (79%)	\$4.3M (.06%)	\$385M (5%)	\$1.857B (25%)	\$707M (9%)	\$3.105B (41%)	\$346M (5%)
Potential reduction in deployed personnel	40 to 205 (40 based on actions, 205 based on dollars)	0 to 11 (0 based on dollars, 11 based on actions)	12 to 13 (12 based on actions, 13 based on dollars)	64 to 162 (64 based on dollars, 162 based on actions)	24 to 74 (24 based on dollars, 74 based on actions)	20 to 107 (20 based on actions, 107 based on dollars)	4 to 12 (4 based on actions, 12 based on dollars)

Figure 4. Potential JCC–I/A Deployment Reductions
(Ausink et al., 2011)

Note. General Services Administration (GSA), Federal Supply Schedule (FSS).

Figure 5, reprinted from the RAND research report (Ausink et al., 2011), shows that in order for a 1:2 deployment dwell (six months deployed, one year at home) to exist, the number of deployed positions in the JCC would have to be reduced from 286 to 191. The RAND researchers (Ausink et al., 2011) suggested taking the potential personnel reductions identified in Figure 4 and placing them into a reachback cell; however, because all these positions are joint billets, the AF does not have control of the joint manning document and some negotiating would have to be done (Ausink et al., 2011).



Deployment Reductions Required to Affect Dwell Time

Availability	Current	Potential
Deploy-to-dwell time	1:1	1:2
CCOs available to deploy	572 ^a	572
Deployed positions	286	191

Figure 5. Deployment Reductions
(Ausink et al., 2011)

The RAND researchers (Ausink et al., 2011) also conducted focus groups with experienced CCOs to gain insight on the potential advantages of a reachback cell. These CCOs stated that standardization and continuity of the workforce would be tremendous advantages. Reachback cells would be repositories of expertise and a valuable training location for inexperienced CCOs (Ausink et al., 2011). These experienced CCOs felt that placing civilians in a reachback cell and allowing them to administer long-term contracts would mean that rotational CCOs would not have to constantly re-learn the contract terms and conditions of these long-term contracts, which could frustrate the customer and contractor. The reachback cell also provides a safe method to adequately train new CCOs on the high operations tempo of a deployed environment without the risk of dangerous hazards, such as insurgency or terrorism.

F. CONCERNS, SUGGESTIONS, AND DISADVANTAGES OF REACHBACK SUPPORT

Contracting reachback is still in its infancy, and there is no empirical data on its disadvantages. To complete this section of our study, we relied mainly on subjective data gathered from the USAFCENT PMA report (Benivegna et al., 2011) and the RAND report



(Ausink et al., 2011). We also discuss the primary disadvantage of reachback: being separated from the customer (Cascio, 2000).

The USAFCENT PMA team (Benivegna et al., 2011) collected information about reachback. As part of the data collection for the PMA report, the team asked currently deployed CCOs, ECONS commanders, and mission support commanders about their perception of reachback. They offered many concerns about and suggestions for implementing a reachback cell.

One of the CCO's major concerns, noted in the PMA report (Benivegna et al., 2011), was the hours of operation. Many personnel stated the reachback cell needed to be manned 24 hours a day. Others stated that the reachback cell's hours needed to match those of the deployed location it was supporting (Benivegna et al., 2011).

ECONS commanders conveyed concern over losing control and accountability of items purchased at a reachback cell (Benivegna et al., 2011). The commanders stated that they might lose the capability to quickly find the status of a purchase if their respective wing leadership inquired about it.

Everyone interviewed by the PMA team expressed how important it would be for a reachback cell to take into account unique issues at each ECONS location. For example, some Middle Eastern countries do not allow items from prohibited countries. All who participated in the survey also expressed concern that losing personnel for the reachback cell could affect their current mission.

CCOs and ECONS commanders both suggested establishing an online tool to track status for all requirements (Benivegna et al., 2011). This tool would allow any member from the deployed location to get online and view any purchase made by the reachback cell. The



last suggestion noted in the PMA report was that each location would need a liaison to coordinate shipping and receiving information.

The RAND researchers (Ausink et al., 2011) included a table in their report that displayed the potential downsides of using reachback. We reproduce this table in Figure 6.

Potential Downsides of Using Reachback

It may not reduce total AF CCO demands	It may not reduce workload
We've so often seen this. . . . The second you say "yes" and commit to the number of officers, that number is never allowed to go down. . . . Reachback has definite potential to reduce day-to-day strain, but there will just be more things on your plate. (Wright-Patterson AFB Focus Group 3) If there's a greater capability, something will fill it in. We do the job well; consequently there's never an end to the work we're asked to do. (Shaw AFB Focus Group 1)	CCOs are the focal point for any contracting issue. . . . So everyone comes to us. We get calls about deliveries and have to send people over to DCMA. (Hill AFB Focus Group 2) We had issues with LOGCAP, and people would come to us because we're [the] contracting officer. . . . It sometimes got really complicated. Customers came to us first. (Shaw AFB Focus Group 1)
It could increase workload stress	Other services must do their part
If you reduce the workload and then reduce the number of people deployed, that doesn't necessarily reduce stress on the people still in-theater. Reducing the number of people deployed [by] too much will kill those still in-theater. (Randolph AFB Focus Group 2)	Get the Army to step up [and provide some contracting officers of their own]. You won't fix the AF CCO tempo until the Army fixes theirs. (Wright-Patterson AFB Focus Group 2)

Figure 6. Potential Downsides of Using Reachback
(Ausink et al., 2011)

Not being located with the customer is the primary disadvantage of reachback. According to Wayne Cascio (2000) in “Managing a Virtual Workplace,” the major disadvantage of distance is the lack of physical interaction with its associated verbal and non-verbal cues. Cascio (2000) also noted that virtual workplaces lack the synergies that can result from face-to-face communication. This lack of interaction can raise issues of trust within the team (Cascio, 2000).



G. SUMMARY

In this chapter, we provided a background and literature review on current reachback concepts and research and on the applicability of reachback to the different phases of contingency contracting. In this chapter, we began to answer our primary research question—What is the reachback viability for USAFCENT GPC purchases?—by focusing on two secondary questions: (1) Is the U.S. military currently employing reachback for contingencies? and (2) What are the advantages and disadvantages of reachback? In order to tackle the secondary questions, we first discussed different reachback initiatives conducted by branches of the U.S. military. The AF currently uses reachback services for civil engineering support through the AFCESA Reachback Center. AF also employs reachback capability with remotely piloted aircraft (RPA). While sitting in a trailer at a classified location in the Nevada desert, pilots control RPA thousands of miles away and maintain combat effectiveness while protecting human capital and saving deployment and training costs of the pilots. The Marine Corps uses contracting reachback through regional support. Each base is assigned to a region, similar to how an AF base is assigned to a Major Command (MAJCOM). These regions provide support to CCOs from that region during contingency operations.

Next, we analyzed the 2011 RAND report (Ausink et al., 2011) on AF contingency contracting. As mentioned previously, this is the most comprehensive study to date on the concept of AF contingency contracting reachback support. Then, we discussed the four phases of contingency contracting, as defined by the *DCCH* (Yoder et al., 2010), and how reachback could support each phase. We also discussed the Phase Zero concept introduced



by Yoder (2004) and how his Three-Tier model works. Finally, we presented the advantages disadvantages, and concerns of creating a reachback cell.



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III. PRESENTATION OF USAFCENT ORGANIZATIONAL STRUCTURE AND SPEND-DATA

A. INTRODUCTION

Our purpose in this chapter is to present the USAFCENT organizational chart, the spend-data metrics for the USAFCENT contracting offices, and the spend-data metrics for the RICC. In Section B, we discuss the current USAFCENT organizational chart, CCO authorizations, and the current process for purchasing in theater. In Section C, we present the data in terms of total dollars obligated, total GPC dollars obligated, total contract actions, and total GPC contract actions. This information is important because it shows what percentage of each unit's purchases is accomplished using the GPC. In Section D, we compare similar spend-data from the RICC. Because the RICC is an established reachback cell for JTSCC, we use their data as a benchmark for comparing actions per buyer between the RICC and USAFCENT. In this chapter, we answer one of our secondary research questions: What percentage of GPC purchases in the AOR are provided by U.S. vendors/suppliers?

B. USAFCENT ORGANIZATIONAL STRUCTURE

USAFCENT has organized its AEW into the same wing-group-squadron structure found on stateside bases (see Figure 7). Each ECONS reports to its numbered expeditionary mission support group (EMSG), which in turn reports to the Expeditionary Wing. The offices at Eskan Village, Saudi Arabia, and Thumrait, Oman, report to an air expeditionary group (AEG) that typically reports to an AEW located at another base. AEGs are not large enough to necessitate the full wing-group-squadron format. This structure represents the operational chain of command. Because contracting is a functional support career field,



USAFCENT has also created a functional chain of command (see Figure 8). The purpose of this chain is to provide contracting squadrons with policy oversight, contracting assistance, and all general functional guidance. The commander of the USAFCENT contracting office (A7/K) does not have supervisory authority over the commanders of the contracting squadrons. However, the A7/K does determine how incoming CCOs are apportioned to each squadron based on manning documents. The A7/K office at Shaw AFB, Sumter, South Carolina, has a forward-deployed office called USAFCENT Forward (AFFOR) A7/K. This office serves as the director of contracting's representative in theater and delegates with Head of Contracting Activity (HCA) authority for any contract action above the contracting squadron commander's authority.

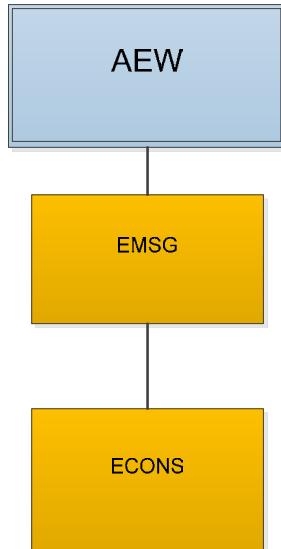


Figure 7. USAFCENT Operational Structure



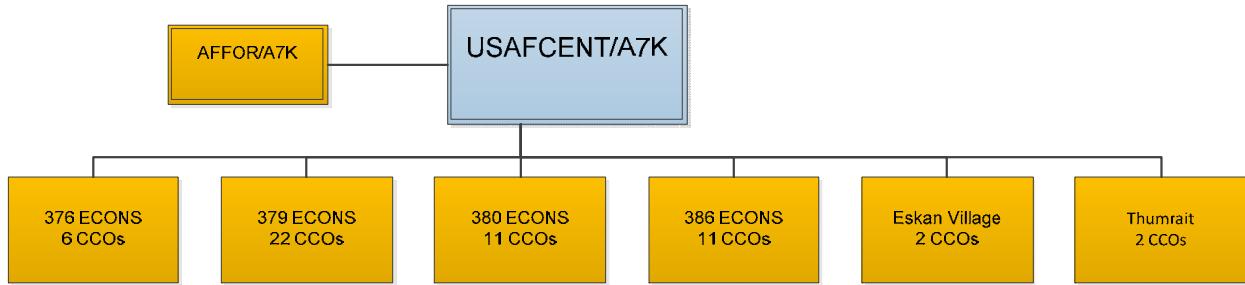


Figure 8. USAFCENT A7/K Functional Structure

C. USAFCENT CONTRACTING METRICS

In this section, we analyze data that was previously collected by the USAFCENT A7/K office and USAFCENT PMA team (Al-Udeid Air Base [AUAB] Combined Air Operations Center [CAOC], personal communication, October 3, 2011). The PMA team traveled to the four largest USAFCENT contracting squadrons from June 2–17, 2011, to assess the health and readiness of the squadrons as well as to conduct CCO interviews on various issues (Benivegna et al., 2011). The squadrons the PMA team visited were the 376th ECONS at Transit Center Manas, Kyrgyzstan; the 379th ECONS at Al-Udeid Air Base (AB), Qatar; the 380th ECONS at Al-Dhafra AB, UAE; and the 386th ECONS at Ali Al-Salem AB, Kuwait. Due to time constraints, the team did not visit the contracting offices at Eskan Village, Saudi Arabia, or Thumrait, Oman (Benivegna et al., 2011). These offices, however, along with the other offices, submit monthly contracting metrics to the USAFCENT A7/K office. The data is compiled by the USAFCENT AFFOR A7/K office located at Al-Udeid AB, Qatar, so that all the squadrons' information is available on a single Excel spreadsheet (AUAB CAOC, personal communication, October 3, 2011). The data we received from the A7/K was open information with all personal identification removed. We, the authors of this



joint applied project, did not conduct any human subject research. Therefore, Institutional Review Board (IRB) approval was not needed.

In the following sections, we analyze FY11 data. We present the larger squadrons in numerical order and conclude with the smaller contracting offices. After the analysis of each location, we present overall USAFCENT metrics and how each individual squadron compares with the others. All statistics and charts in this section were created from data provided by Major Tina Benivegna of the USAFCENT A7/K office (AUAB CAOC, personal communication, October 3, 2011). We interpret the data in Chapter IV.

1. 376th ECONS, Transit Center, Manas, Kyrgyzstan

The 376th ECONS, Transit Center at Manas, Kyrgyzstan, primarily supports the 376th AEW units, which provide air combat power projection with tactical airlift and air refueling aircraft. Additionally, the wing serves as a hub for strategic airlift operations and as an intermediate staging base for transiting personnel and equipment in support of operations in Afghanistan. The 376th ECONS also provides support to the Theater Security Cooperation Cell (TSCC) and the Civil Military Operation Office of Cooperation for Army Central Command for Humanitarian Assistance requirements (Benivegna et al., 2011).

As of October 3, 2011, the 376th had six CCOs assigned to the squadron; those CCOs had awarded 2,292 contract actions for FY11. Of those 2,292 actions, 557 were awarded using the GPC, which is 24.30% of total actions (see Figure 9). The 376th obligated \$40.78 million in FY11; \$1.98 million of that amount was for GPC purchases (see Figure 10). The total number of GPC dollars obligated by the 376th accounts for approximately 4.85% of their total dollars obligated for FY11. As shown in Figure 11, the 376th spent 100% of its GPC dollars in the U.S.



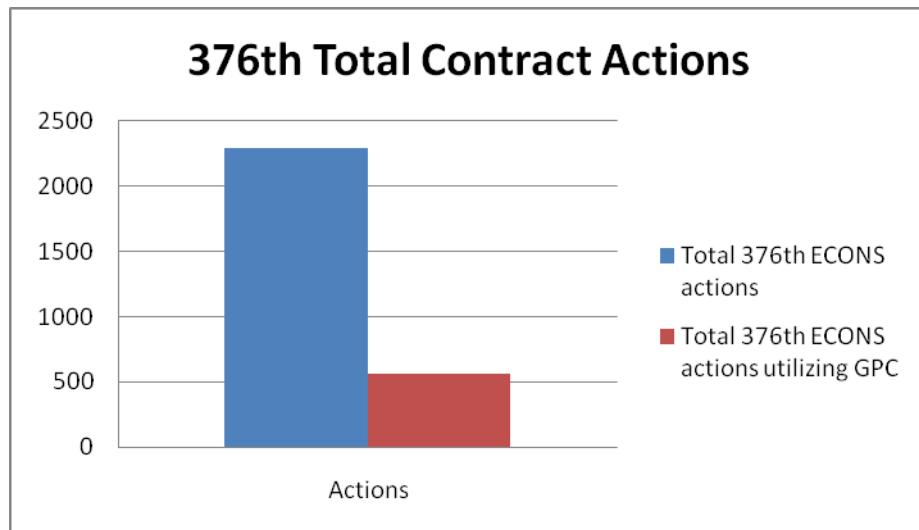


Figure 9. 376th Total Contract Actions

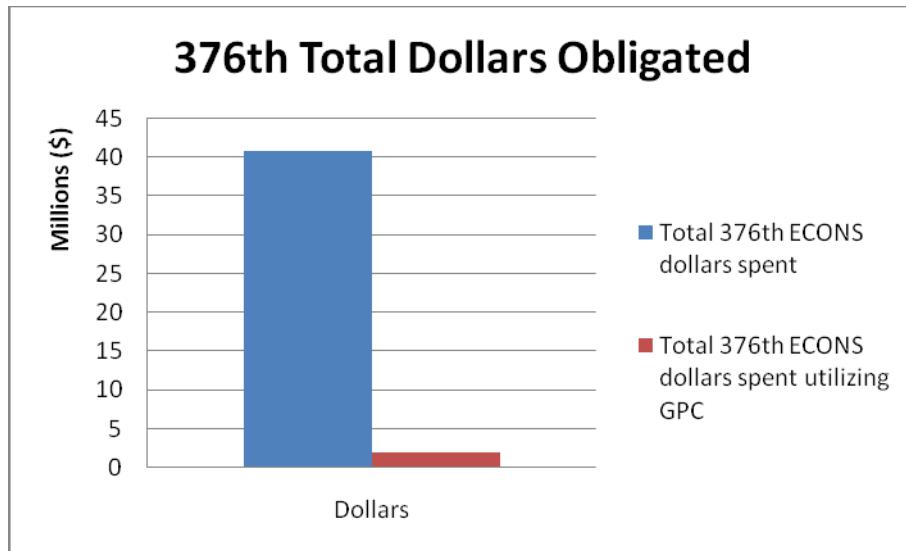


Figure 10. 376th Total Dollars Obligated



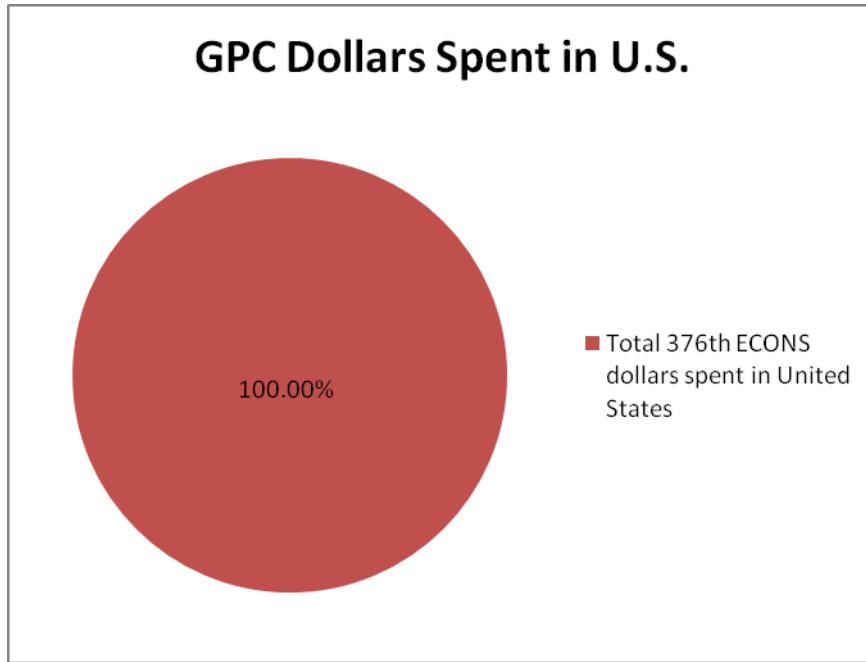


Figure 11. 376th GPC Dollars Spent in the U.S.

2. 379th ECONS, Al-Udeid Air Base, Qatar

The 379th ECONS supports a large composite flying wing, the 379th Air Expeditionary Wing, and its associate units. The 379th AEW is one of the largest and most diverse overseas wings and has over 100 operational aircraft. The office provides more traditional commodity, construction, and complex services procurement support. However, a significant amount of contract support for the installation is provided via the Air Force Contract Augmentation Program, which the 379th ECONS helps oversee and facilitate. The ECONS also aids in sustainment of one significant tenant unit, the 1st Expeditionary Red Horse Group, which serves as the logistics hub to coordinate and supply the forward deployed civil engineer missions (Benivegna et al., 2011).



As of October 3, 2011, the 379th had 22 CCOs assigned to the squadron. This squadron is unique among the other USAFCENT squadrons because it has decentralized GPC holders. This means trained cardholders in other units are authorized to make micro-purchases for their respective units under the supervision of a CCO. The 379th has awarded 3,298 contract actions for FY11. Of those contract actions 1,465 were awarded by CCOs using the GPC, and 1,331 were awarded by the customer using decentralized GPC. Utilizing only the 379th's CCO GPC data, 44.42% of total contract actions were GPC purchases (see Figure 12). After including the decentralized purchases, the number increased to 84.78%. The 379th obligated \$66.72 million in FY11; \$7.39 million of that amount was for CCO GPC purchases, and \$2.09 million was for customer decentralized GPC purchases (see Figure 13). The total GPC dollars obligated by the 379th accounted for approximately 14.20% of its total dollars obligated for FY11. As shown in Figure 14, the total amount of 379th GPC dollars spent in the U.S. was 53.89%.



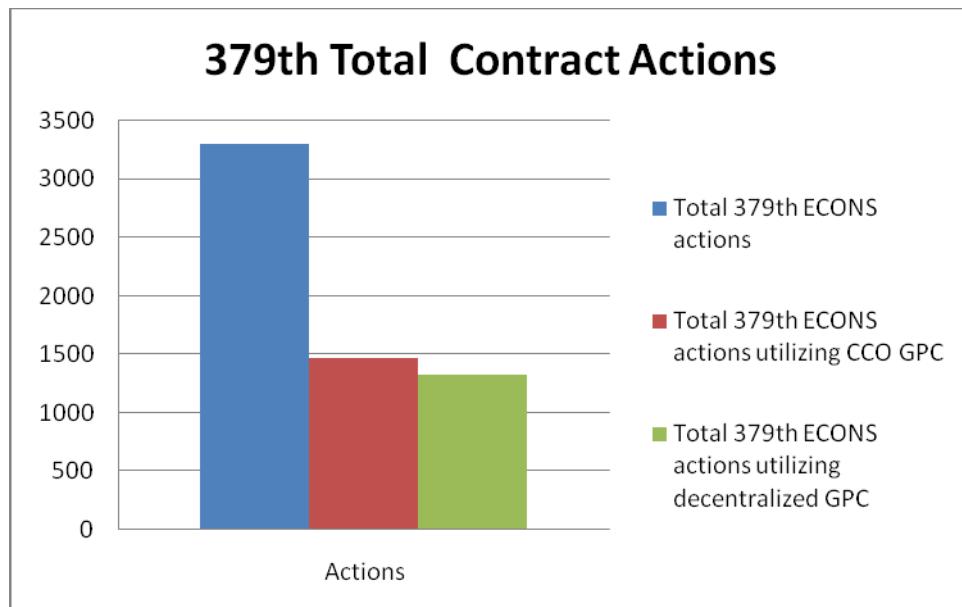


Figure 12. 379th Total Contract Actions

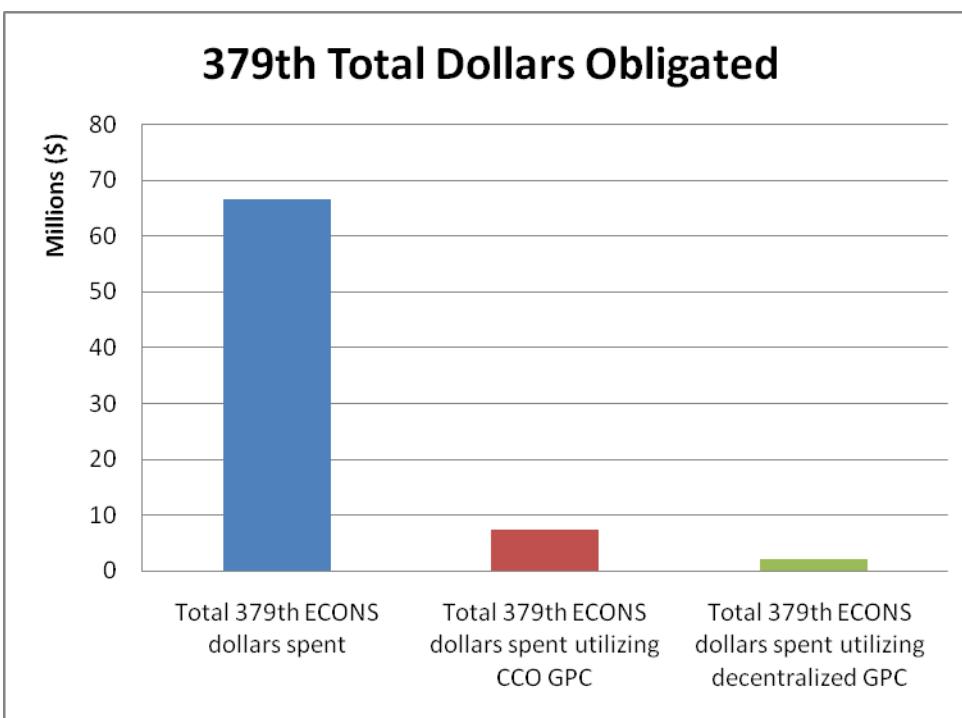


Figure 13. 379th Total Dollars Obligated



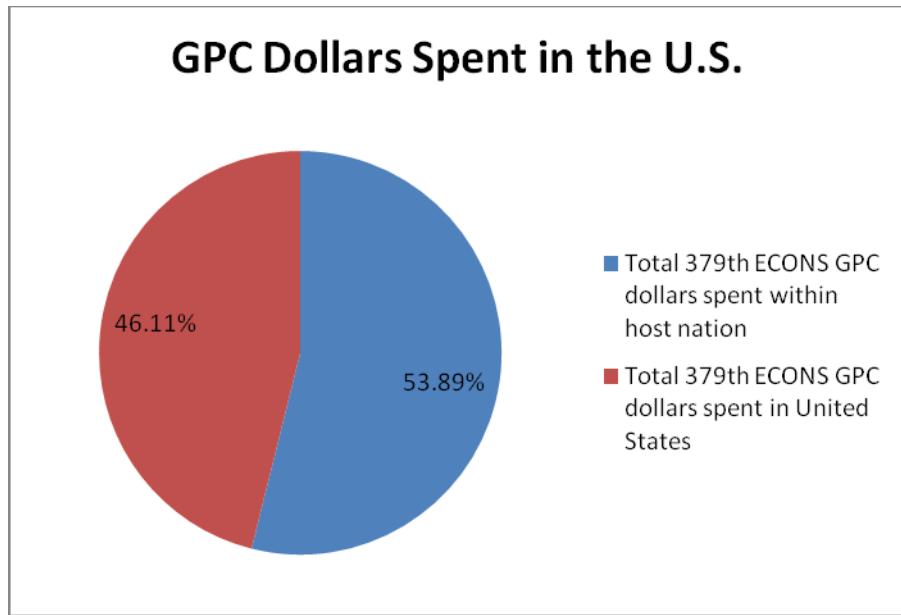


Figure 14. 379th GPC Dollars Spent in the U.S.

3. 380th ECONS, Al-Dhafra Air Base, United Arab Emirates

Similar to Al-Udeid AB, the 380th ECONS, Al-Dhafra AB, supports a large flying wing. While the type of aircraft, size, and mission are much different from the 379th AEW, the 380th ECONS supports a more traditional wing structure with primary customers residing in the EMSG. The 380th ECONS also supports one large tenant on the installation, the 363rd Training Group (Air Warfare Center). The 363rd's primary mission is to conduct training exercises, which generates a substantial workload for the 380th. Additionally, the 380th supports the 60th Expeditionary Reconnaissance Squadron at Djibouti, the Army Patriot Battery, and a Navy detachment (Benivegna et al., 2011).

As of October 3, 2011, the 380th had 11 CCOs assigned to the squadron, and those CCOs had awarded 2,583 contract actions for FY11. Of those 2,583 actions, 1,530 were awarded using the GPC, which is 59.23% of total actions (see Figure 15). The 380th obligated \$44.06 million in FY11, \$4.35 million of which was for GPC purchases (see Figure



16). The total GPC dollars obligated by the 380th accounted for approximately 9.88% of their total dollars obligated for FY11. As shown in Figure 17, the total amount of 380th GPC dollars spent in the U.S. was 43.07%.

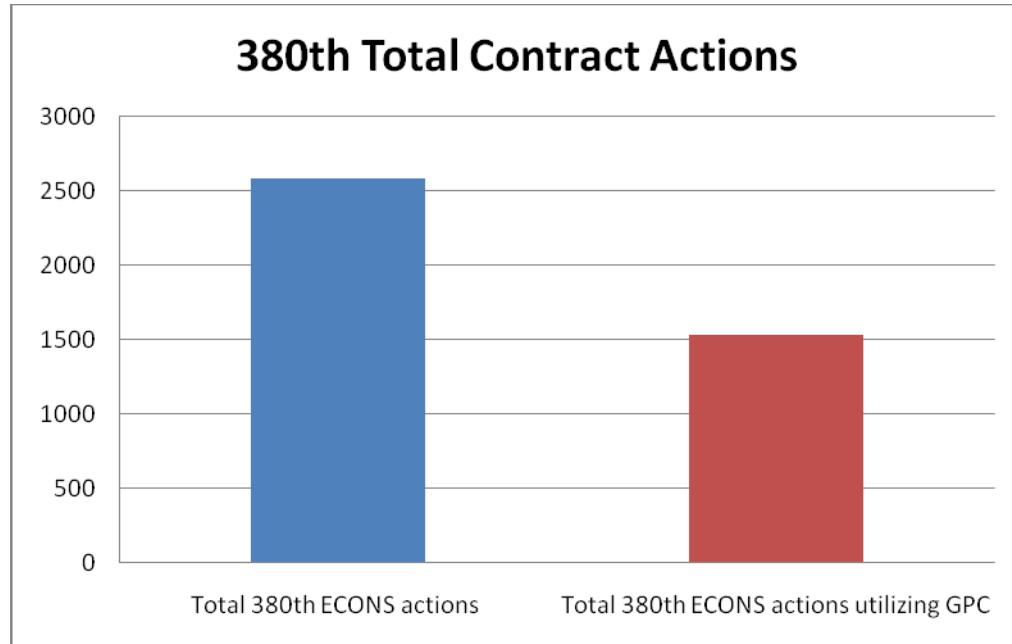


Figure 15. 380th Total Contract Actions



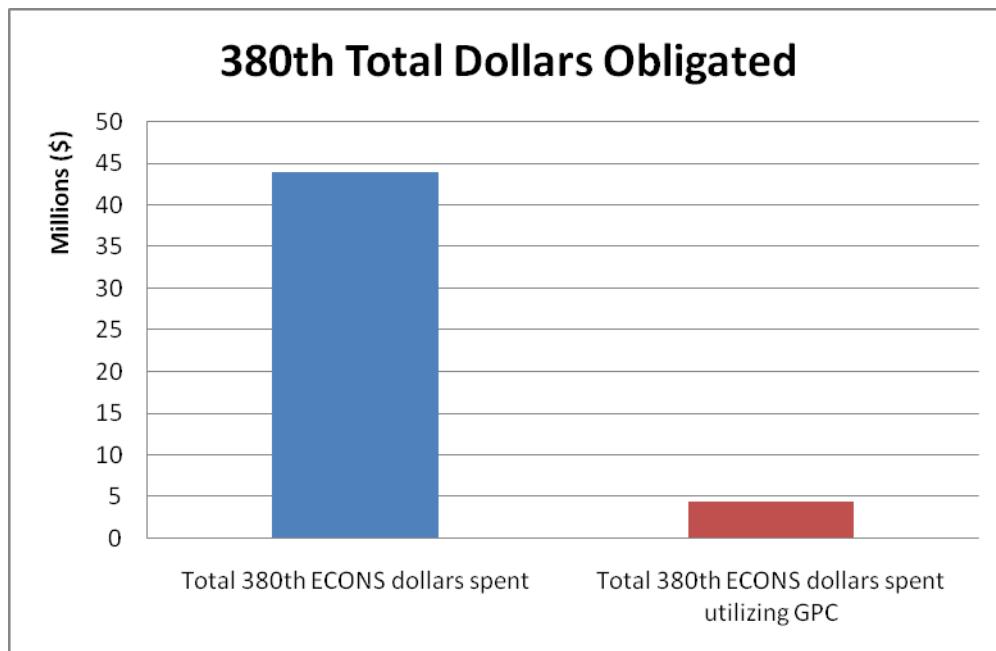


Figure 16. 380th Total Dollars Obligated

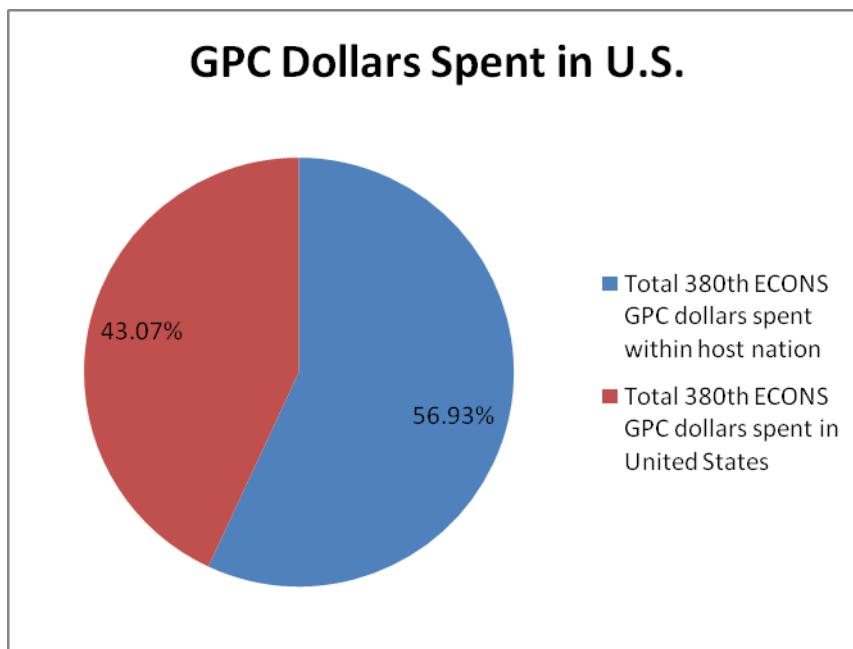


Figure 17. 380th GPC Dollars Spent in the U.S.



4. 386th ECONS, Ali Al-Salem Air Base, Kuwait

The 386th ECONS, Ali Al-Salem AB, primarily supports the 386th AEW units, as well as the 386th AEG at Kuwait City International Airport. The 386th ECONS performs commodity purchasing to support detainee operations and a combat line-haul mission at Camp Arifjan and an Air Force Security Forces unit at another smaller location (Benivegna et al., 2011).

As of October 3, 2011, the 386th had 11 CCOs assigned to the squadron; those CCOs had awarded 1,677 contract actions for FY11. Of those 1,677 actions, 1,348 were awarded using the GPC, which is 80.38% of total actions (see Figure 18). The 386th obligated \$26.31 million in FY11, \$3.53 million of which was for GPC purchases (see Figure 19). The total GPC dollars obligated by the 386th accounted for approximately 13.41% of the unit's total dollars obligated for FY11. As shown in Figure 20, the total amount of 386th GPC dollars spent in the U.S. was 48.89%.



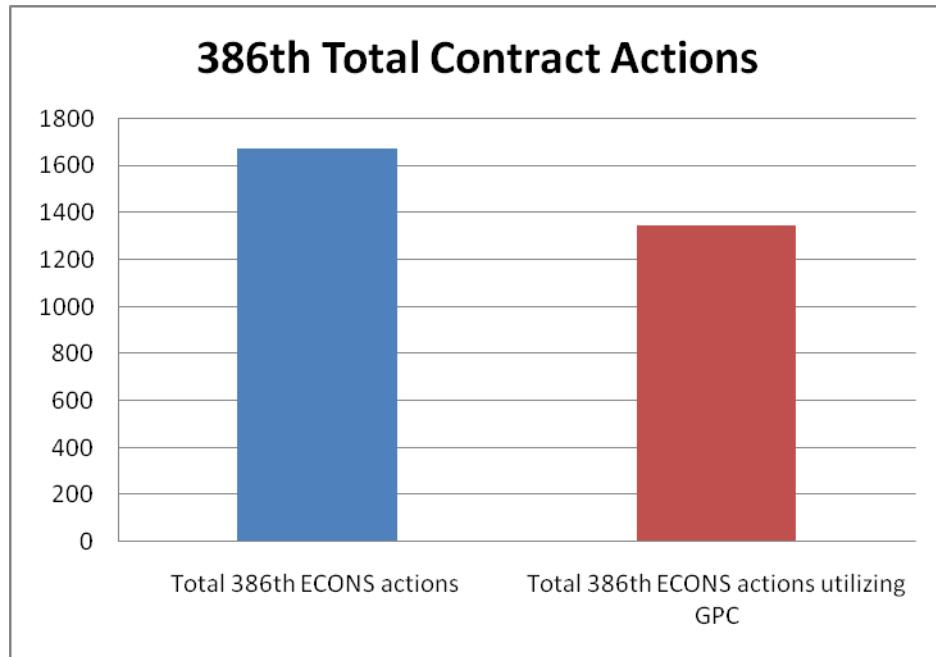


Figure 18. 386th Total Contract Actions

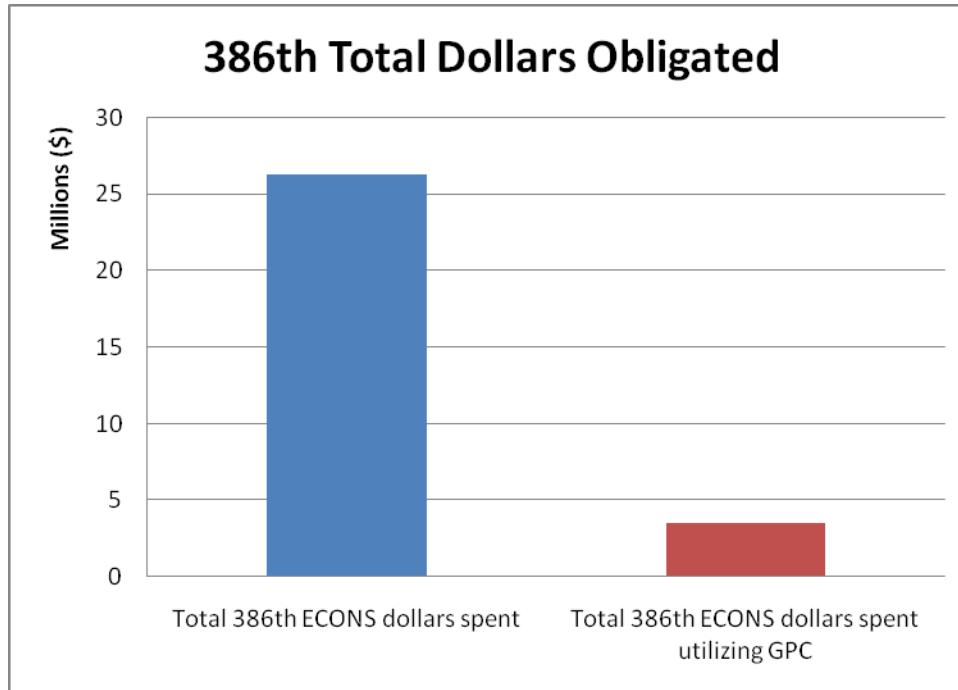


Figure 19. 386th Total Dollars Obligated



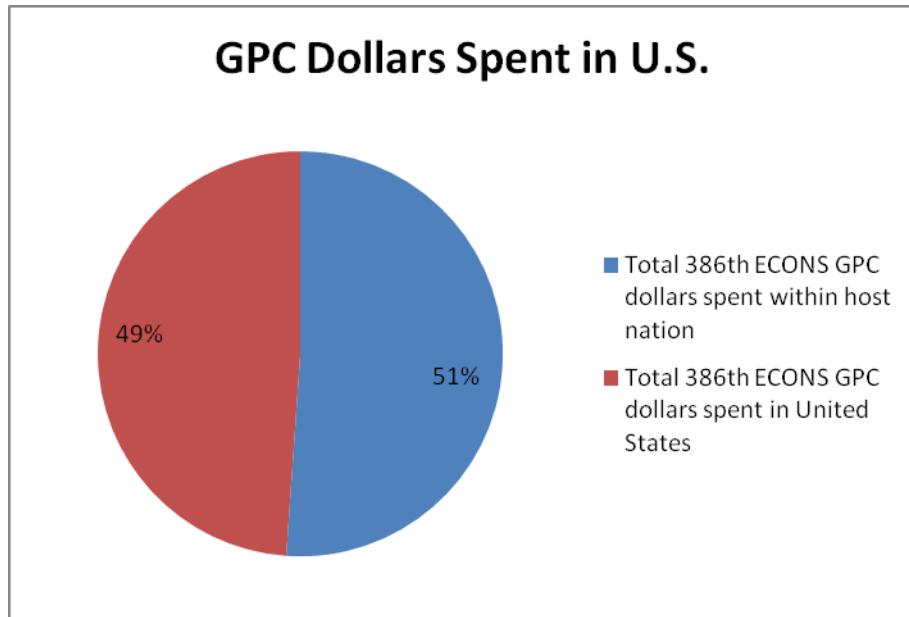


Figure 20. 386th GPC Dollars Spent in the U.S.

5. 64th Expeditionary Support Squadron/Contracting (ESS/CON), Eskan Village, Saudi Arabia

The 64th AEG is an all-AF contingent located at Eskan Village with the primary mission of providing force protection support to the larger U.S. military training mission and the Office of Personnel Management–Saudi Arabian National Guard (OPM–SANG) missions also operating out of Eskan Village. The 64th ESS/CON executes contract actions in support of the units with the ESS, which includes the large security forces organization that protects Eskan Village (Michael, Mazur, Sackett, & Mahar, 2008).

As of October 3, 2011, the 64th had two CCOs assigned to the office; those CCOs had awarded 432 contract actions for FY11. Of those 432 actions, 252 were awarded using the GPC, which is 58.33% of total actions (see Figure 21). The 64th obligated \$4.58 million in FY11, \$512,768 of which was for GPC purchases (see Figure 22). The total GPC dollars obligated by the 64th accounted for approximately 11.19% of its total dollars



obligated for FY11. As shown in Figure 23, the total amount of 64th GPC dollars spent in the U.S. was 38.09%.



Figure 21. 64th Total Contract Actions



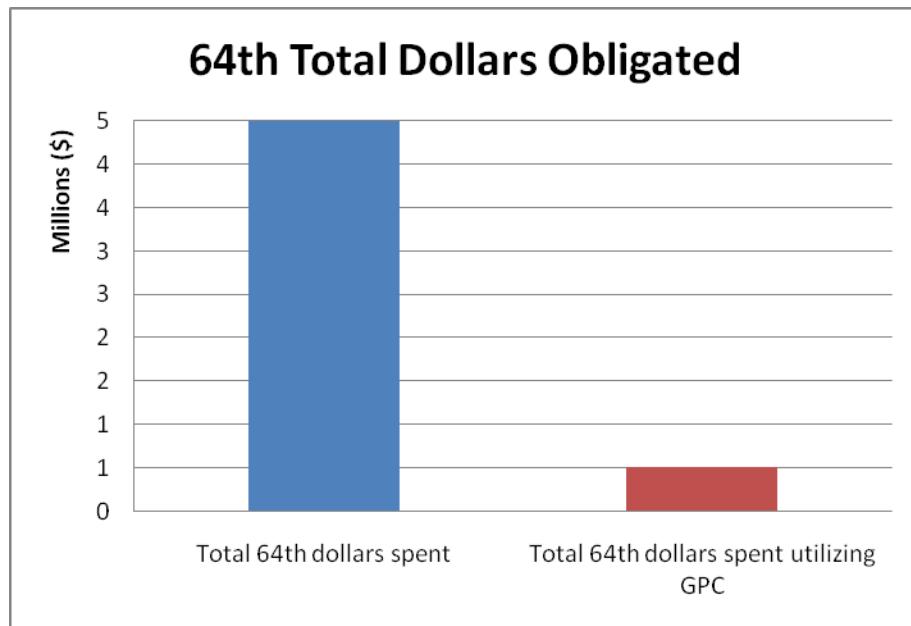


Figure 22. 64th Total Dollars Obligated

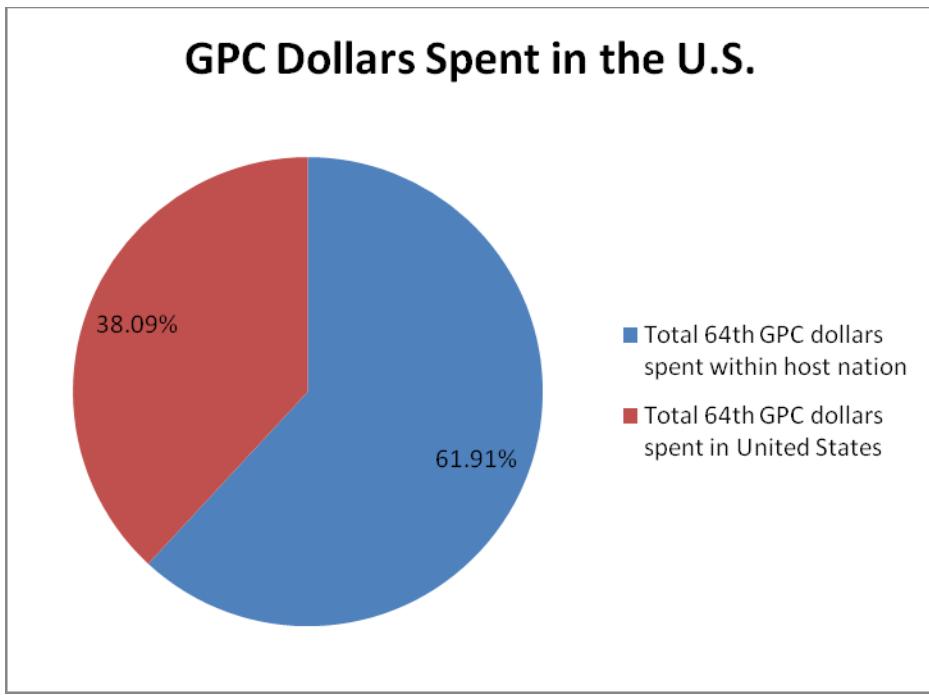


Figure 23. 64th GPC Dollars Spent in the U.S.



6. 405th Expeditionary Support Squadron/ECONS, Thumrait, Oman

The 405th ESS/ECONS supports Salah Port Operations in Oman to move critical equipment into and out of theater, primarily mine resistant ambush protected (MRAP) vehicles. This is the second smallest office in terms of actions (behind the 64th at Eskan Village).

As of October 3, 2011, the 405th had two CCOs assigned to the office; those CCOs had awarded 718 contract actions for FY11. Of those 718 actions, 326 were awarded using the GPC, which is 45.40% of total actions (see Figure 24). The 405th obligated \$11.35 million in FY11, \$764,273 of which was for GPC purchases (see Figure 25). The total GPC dollars obligated by the 405th accounted for approximately 6.73% of its total dollars obligated for FY11. As shown in Figure 26, the total amount of 405th GPC dollars spent in the U.S. was 78.95%.

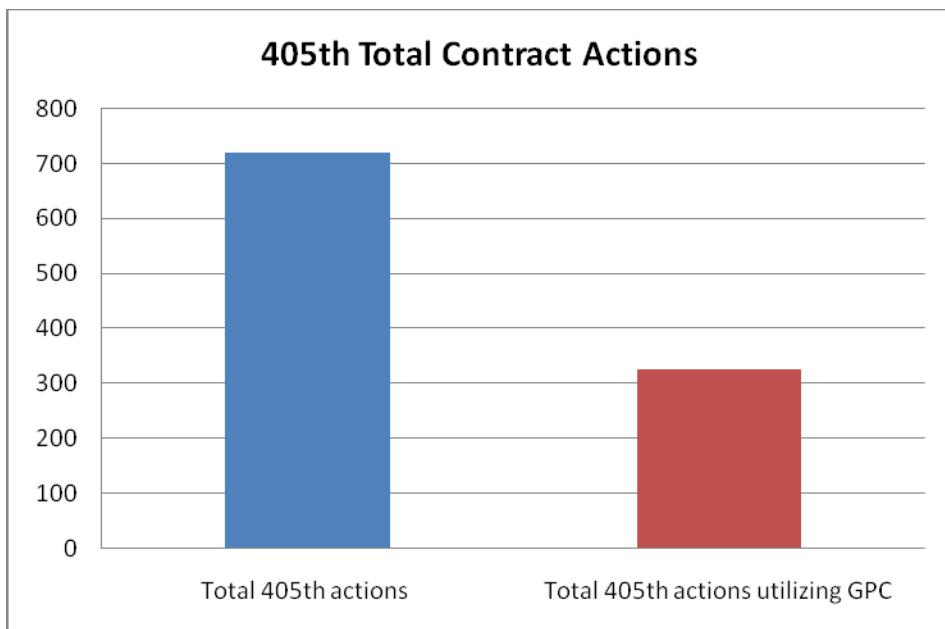


Figure 24. 405th Total Contract Actions



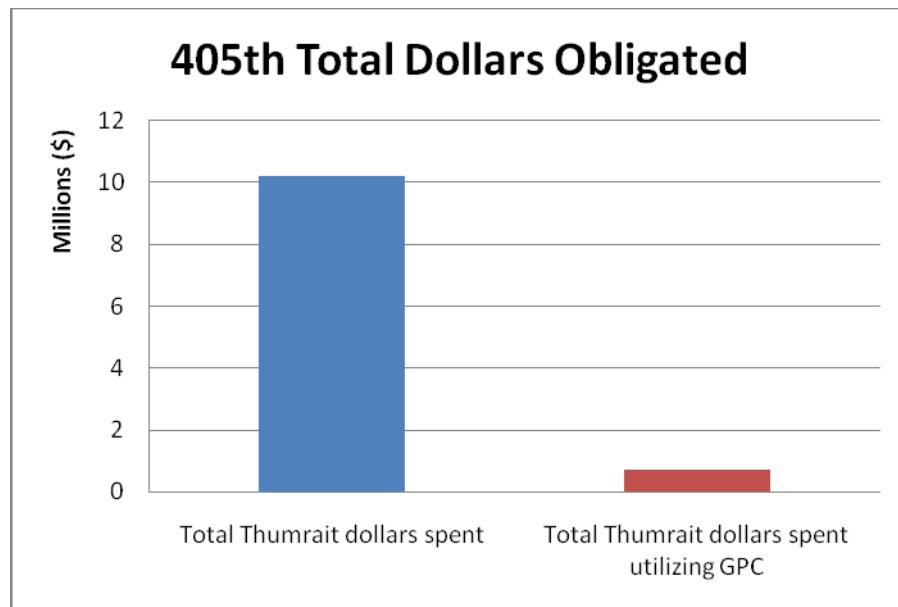


Figure 25. 405th Total Dollars Obligated

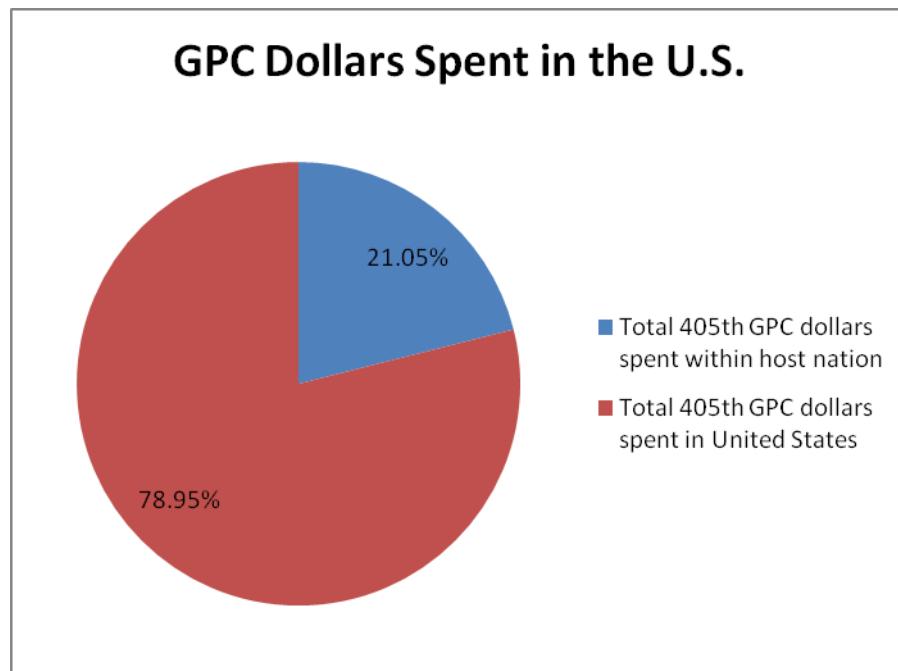


Figure 26. 405th GPC Dollars Spent in the U.S.



7. Total USAFCENT and Squadron Comparison

In this section, we present the overall USAFCENT data and compare the squadrons to one another. Overall, USAFCENT produced 11,000 actions for FY11. Of those actions, 6,816 were executed using the GPC. The GPC accounted for 61.96% of the total contract actions (see Figure 27). The total dollar obligation for USAFCENT in FY11 was \$193.81 million, \$20.62 million of which was obligated using the GPC. This accounts for 10.64% of all dollars obligated (see Figure 28). The squadrons are compared in Table 3 by total actions, GPC actions, dollars obligated using GPC, and GPC dollars obligated to the U.S.

Table 3. USAFCENT Squadron Comparison

Office	FY11 total dollars obligated	% dollars obligated using GPC	FY11 total actions	% of actions using GPC	% GPC dollars obligated to U.S. vendors
376th ECONS	\$40,782,614.20	4.85%	2,292	24.30%	100.00%
379th ECONS	\$66,723,021.10	14.20%	3,298	84.78%	46.11%
380th ECONS	\$44,058,831.62	9.88%	2,583	59.23%	43.07%
386th ECONS	\$26,314,538.54	13.41%	1,677	80.38%	48.89%
64th ESS/ECONS	\$4,581,469.62	11.19%	432	58.33%	38.09%
405th ESS/ECONS	\$11,351,124.27	6.73%	718	45.40%	78.95%
Overall USAFCENT	\$193,811,599.35	10.64%	11,000	61.96%	52.15%



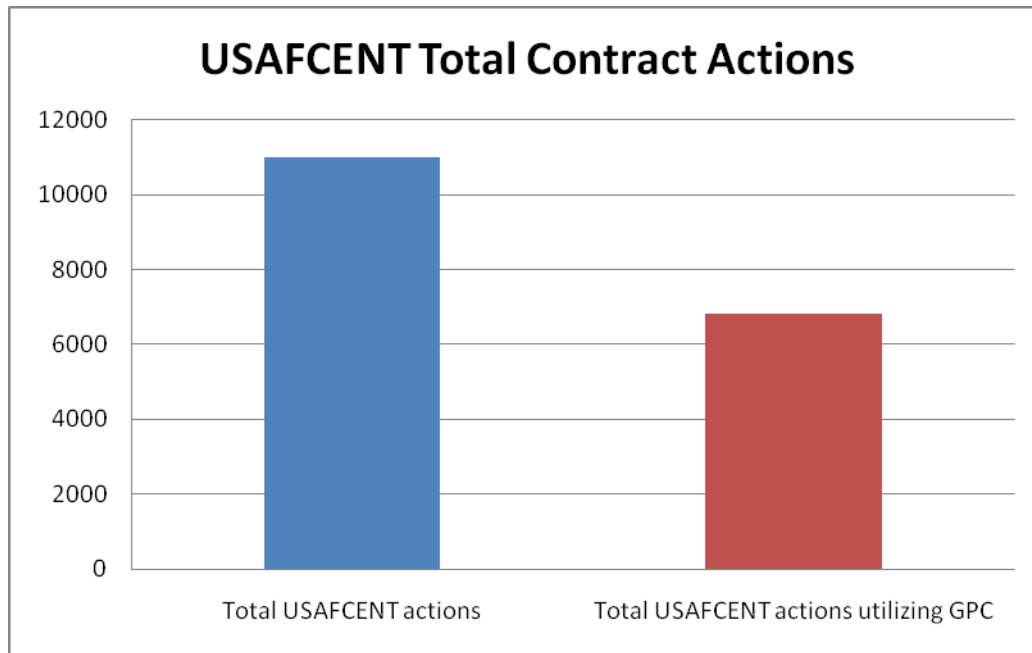


Figure 27. USAFCENT Total Contract Actions

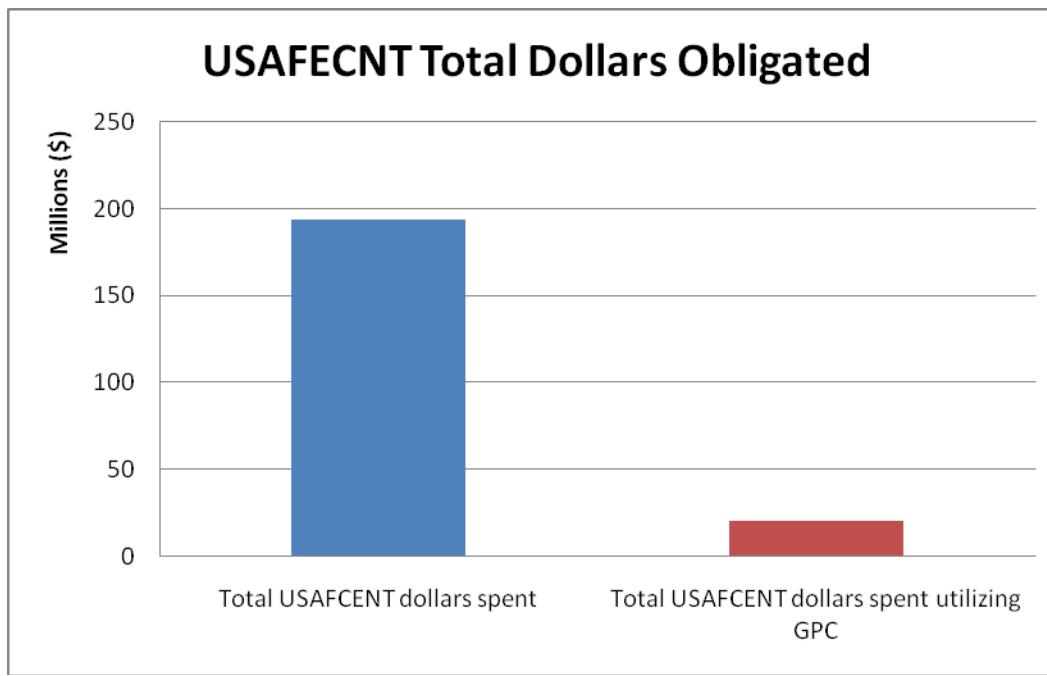


Figure 28. USAFCENT Total Dollars Obligated



8. Rock Island Contracting Center CCO Average Workload

In this section, we present data provided by Maj Fred Lacey (personal communication, October 14, 2011) from the non-complex reachback cell. The non-complex cell periodically analyzes its own data to determine the average number of actions per CCO. As of September 17, 2011, the average number of monthly actions per CCO was 37. This number is used in Chapter IV as a benchmark for a potential reachback cell minimum workload rate.

D. SUMMARY

In this chapter, we presented the spend-data of the USAFCENT contracting offices and explained how the operational and functional chains of command operate. We answered one of our secondary research questions—What percentage of GPC purchases in the AOR are provided by U.S. vendors and suppliers?—by interpreting the spend-data. We presented graphs that showed total contract actions, total contract actions using the GPC, total dollars obligated, total GPC dollars obligated, and total dollars obligated within the U.S. and the host nation. These numbers are important for Chapter IV, in which we create a potential reduction model for a potential reachback cell. We concluded Chapter III by presenting the current workload rate from the RICC. This data provided a useful benchmark statistic for use in calculating the required number of CCOs in a potential reachback cell.



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IV. FINDINGS AND REACHBACK MODEL

A. INTRODUCTION

In this chapter, we present our findings and reachback model. In Section B, we provide an interpretation of the data presented in Chapter III. After reading this section, readers will understand how we determined the correct manning levels to use for the potential reductions and the current monthly actions per CCO. In Section C, we first discuss the assumptions and constraints we used to develop the model; after that discussion, readers should know the limitations of the model and its potential issues. AF leaders may have to consider these limitations when determining the viability of the reachback model. Next, we present the methodology we used to develop the model based on our assumptions and constraints. In the final part of Section C, we provide interpretations of the model so that readers will understand the potential reachback viability and how the research begins to answer our primary research question.

B. INTERPRETATION OF DATA

In this section, we provide an interpretation of the data we presented in Chapter III. We observe each squadron's actions and the actions per CCO. While it is important to track the number of dollars obligated within the host nation and U.S., for the purposes of our research, we observed only contract actions for the following reason: One contract action could be for a multi-million dollar award, whereas ten GPC actions could hypothetically total \$150,000 if they were purchased in the U.S. under continental U.S. (CONUS) thresholds. The total dollars obligated for contract actions may not indicate the squadron's true workload. We now discuss each of the ECONS we studied.

1. 376th ECONS

According to the current manning, the 376th ECONS has six CCOs assigned. This includes one chief of contracting and five buyers. One of the CCOs has the additional duty of superintendent; however, this position is still primarily a buyer. The chief of contracting is the only position that does not regularly award contracts/modifications, so we



must assume that the contract actions are made by the five CCOs. The total actions for FY11, according to Table 3 (Chapter III), were 2,292, which is 458.4 actions per buyer. This equals 38.20 actions per CCO per month; however, this represents all contract actions, such as construction, services, purchase orders, and modifications. Figure 9 (Chapter III) shows that the 376th performed 557 contract actions using the GPC, which equals approximately 9.28 actions per CCO per month. We also know from Figure 11 that 100% of the GPC dollars obligated were spent with U.S. vendors, so all 557 GPC actions were done in the U.S. This particular location is the only squadron in USAFCENT where 100% of the GPC dollars were spent in the U.S., because Kyrgyzstani companies do not accept the GPC (Benivegna et al., 2011). They accept only cash and Electronic Funds Transfer (EFT). All other squadrons are located in mature contracting environments where using GPC with local vendors is possible.

2. 379th ECONS

According to the current manning, the 379th ECONS has 22 CCOs assigned. This includes one squadron commander, one superintendent, four flight commanders, and 16 buyers. This squadron is the largest in USAFCENT in terms of size, dollars obligated, and actions. The commander, superintendent, and flight commanders do not regularly perform contract awards/modifications, so we must assume that the contract actions are performed by the 16 CCOs. This is the only ECONS where the flight commanders are used primarily for review purposes and not for the awarding of contracts. Therefore, they are not used in the model as CCOs. If they are used in the future, the actions per buyer would decrease. The total actions for FY11, according to Table 3, were 3,298 which is 206.13 actions per buyer. This equals 17.18 contract actions per buyer per month. As in the 376th, these 17.18 actions represent all contract actions, including GPC purchases. Figure 12 shows that the 379th ECONS performed 1,465 contract actions using the GPC, which equals approximately 7.63 GPC actions per CCO per month. As mentioned in Chapter III, the 379th also has decentralized GPC holders in other squadrons. Figure 12 shows that the decentralized GPC holders performed 1,331 actions. Because ECONS CCOs provide supervisory oversight on these purchases, the total GPC actions awarded/supervised by the squadron add up to 1,465+1,331, which equals 2,796. This would equal 14.56 GPC actions per CCO per month,



had the 379th kept these actions in-house. By decentralizing, the 379th ECONS is able to reduce its GPC workload by 6.93 GPC actions per CCO per month.

3. 380th ECONS

According to the current manning, the 380th ECONS has 11 CCOs assigned. This includes one squadron commander, one superintendent, and three flight commanders. The squadron commander and superintendent are the only positions that do not regularly award contracts/modifications, so we must assume that the contract actions are made by the nine CCOs. The total actions for FY11, according to Table 3, were 2,583, which is 287 actions per buyer. This equals 23.92 actions per CCO per month; however, this represents all contract actions, such as construction, services, purchase orders, and modifications, which is similar to the previously mentioned squadrons. Figure 15 shows that the 380th performed 1,530 contract actions using the GPC, which equals approximately 14.17 actions per CCO per month.

4. 386th ECONS

According to the current manning, the 386th ECONS has 11 CCOs assigned. This includes one squadron commander, one superintendent, and two flight commanders. The squadron commander and superintendent are the only positions that do not regularly award contracts/modifications, so we must assume that the contract actions are by the nine CCOs. The total actions for FY11, according to Table 3, were 1,677, which is 186.33 actions per buyer. This equals 15.53 actions per CCO per month; however, this represents all contract actions, such as construction, services, purchase orders, and modifications, which is similar to the previously mentioned squadrons. Figure 18 shows that 386th performed 1,348 contract actions using the GPC, which equals 12.48 actions per CCO per month. This means the average CCO at 386th ECONS spends approximately 80.36% of his or her time doing micro-purchases; this is the highest ratio of GPC actions to total actions in USAFCENT AOR.



5. Eskan Village

According to the current manning, Eskan Village has two CCOs assigned. One CCO is designated the chief of contracting, but both personnel perform contract awards and modifications. The total actions for FY11, according to Table 3, were 432, which is 216 actions per buyer. This equals 18 actions per CCO per month; however, this represents all contract actions, such as construction, services, purchase orders, and modifications, which is similar to the previously mentioned squadrons. Figure 21 shows that Eskan Village performed 252 contract actions using the GPC, which equals 10.50 actions per CCO per month.

6. Thumrait

According to the current manning, Thumrait has two CCOs assigned. One CCO is designated the chief of contracting, but, similar to the Eskan Village office, both personnel perform contract awards and modifications. The total actions for FY11, according to Table 3, were 718, which is 359 actions per buyer. This equals 29.92 actions per CCO per month; however, this represents all contract actions such as construction, services, purchase orders, and modifications, which is similar to the previously mentioned squadrons. Figure 24 shows that Thumrait performed 326 contract actions using the GPC, which equals 13.58 actions per CCO per month.

C. POTENTIAL REACHBACK MODEL

This section provides conceptualized models of the potential reduction in airmen from the USAFCENT AOR if reachback is implemented. Our intent is to show the reader the viability of GPC reachback using the several assumptions and constraints that should be considered based on the data gathered throughout this research. AF leaders should consider these assumptions and constraints before determining whether the potential reductions are viable.

1. Assumptions and Constraints

In developing a model for reachback potential, we were required to make several assumptions and identify possible constraints. These assumptions are important so



that AF leaders can make decisions using workload averages, instead of using the amount of work each CCO actually performs. The assumptions and constraints address a broad area, covering leadership, manning, and workload.

- Not all personnel on the current USAFCENT manning document perform buying responsibilities and, for our analyses, are not counted in the models as CCOs. See Section B in this chapter.
- Each squadron must have, at minimum, two personnel at all times. This assumes one person acts as the chief of contracting, and one person is responsible for buyer duties and contract administration.
- Not every CCO may perform GPC purchases, depending on his or her skill level, but all CCOs have the ability and training to execute GPC purchases when required. Thus, the total number of actions per CCO is divided evenly among all CCOs and not by position on the organizational chart.
- The current FY11 monthly average of actions per CCO includes all duty hours spent in and out of the office. For example, these hours could include traveling off base to make purchases from host-nation vendors, working badging issues for contractors, and performing additional duties.
- Although there is a wide range of actions per CCO between units, this is a question for leadership; our model does not address this issue.
- We did not analyze the reduction in management personnel, but if CCOs are decreased from a location, fewer management personnel might be appropriate.
- The 376th ECONS is the only unit that awards 100% of GPC purchases stateside.

2. Development of the Model

Due to the limitations in the data maintained by the USAFCENT A7/K office, we were able to create a model based only on the total actions, GPC actions, and number of CCOs currently in each office. The benefit of creating this model with limited data is to show an “apples-to-apples” comparison of each squadron’s workload. As stated in Section B, only the actual number of buyers was used in the model and leadership positions were left out.

All our models are based on the FY11 data given in Tables 4 and 5 (using these numbers, we created additional tables using reachback solutions of 25%, 50%, and



75%). USAFCENT does not track the number of GPC actions to stateside vendors, only dollars. We wanted to study the consequences of a 50% reduction in GPC actions from total USAFCENT actions. We added 25% and 75% reductions to provide meaningful sensitivity analysis. Because the 376th ECONS is the only location where all GPC actions are awarded to stateside vendors, a 100% reachback solution was developed for only this squadron. In order to develop the models, we calculated the workload reductions, which then led to the potential reductions of CCOs. We now explain our analysis and the calculations we made based on that analysis.

Table 4. Total Actions per CCO

Office	# of CCOs	FY11 Total Actions (no reductions)	Avg Total Action per CCO	Avg Monthly Actions by CCO
376th ECONS	5	2,292	458.40	38.20
379th ECONS	16	3,298	206.13	17.18
380th ECONS	9	2,583	287.00	23.92
386th ECONS	9	1,677	186.33	15.53
Eskan Village	2	432	216.00	18.00
Thumrait	2	718	359.00	29.92
USAFCENT Total	43	11,000	255.81	21.32



Table 5. GPC Actions per CCO

Office	# of CCOs	FY11 Total GPC Actions	Avg Yearly Actions per CCO	Avg Monthly Actions by CCO
376th ECONS	5	557	111.40	9.28
379th ECONS	16	1,465	91.56	7.63
380th ECONS	9	1,530	170.00	14.17
386th ECONS	9	1,348	149.78	12.48
Eskan Village	2	252	126.00	10.50
Thumrait	2	326	163.00	13.58
USAFCENT Total	43	5,478	127.40	10.62

Because our primary research question focuses on only GPC reachback, our first step was to isolate the total GPC actions made by each office (see column 2, Table 5). Using these numbers, we determined the total workload reductions based on 25%, 50%, and 75% reductions in GPC actions.

379th ECONS Example:

$$1,465 \text{ Total GPC Actions} \times 25\% = 366.25 \text{ Total GPC Actions Reduced}$$

The second step was to create a table for *Total Actions less x% of GPC actions*. This calculates the total FY11 workload for a squadron if reachback had been implemented.

379th ECONS Example:

$$3298 \text{ Total Actions} - 366.25 \text{ GPC Actions} = \\ 2931.75 \text{ Total Actions less 25% GPC Actions}$$

The third step was to calculate the new workload per CCO based on the current manning at each squadron.

379th ECONS Example:



$$(2931.75 \text{ Total Actions} \div 16 \text{ CCOs}) \div 12 \text{ months} = 15.27 \text{ monthly actions/CCO}$$

The final step was to compare the new workload to the current workload in order to determine the optimal CCO manning reduction. To find the optimal reduction, we decreased the number of CCOs by decrements of one until the new workload ratio gradually increased toward the current workload; however, the number of CCOs was not decreased if it would cause the new workload to exceed the current workload. In the example below, a 25% reduction in GPC actions at the 379th ECONS would result in a one-CCO reduction, because this results in an average number of GPC actions per CCO that is closest to the current workload without exceeding it. A two-CCO reduction results in a workload that exceeds the current workload for each CCO, so the potential reduction ends at a one-CCO reduction. In the example below, given our constraints, the minimum allowable number of CCOs for the 379th, with a 25% solution, is 15.

379th ECONS Example:

At 16 CCOs,

$$\begin{aligned} \text{Workload} &= 15.27 \text{ monthly actions/CCO} && (\text{new workload}) \\ &< 17.18 \text{ monthly actions/CCO} && (\text{current workload}) \end{aligned}$$

Hence, REDUCE CCO total from 16 to 15

At 15 CCOs,

$$\begin{aligned} \text{Workload} &= 16.29 \text{ monthly actions/CCO} && (\text{new workload}) \\ &< 17.18 \text{ monthly actions/CCO} && (\text{current workload}) \end{aligned}$$

Hence, REDUCE CCO total from 15 to 14

At 14 CCOs,

$$\begin{aligned} \text{Workload} &= 17.45 \text{ monthly actions/CCO} && (\text{new workload}) \\ &> 17.18 \text{ monthly actions/CCO} && (\text{current workload}) \end{aligned}$$

Hence, DO NOT REDUCE CCO total to 14.

Figure 29 provides a visual representation of the new workload reductions using the 25%, 50%, and 75% solutions based on the model shown in Table 6. Based on this



data, Figure 30 shows a visual representation of the CCO reductions. Table 6 shows the final result of the model and the potential reduction of CCOs. Subsection 3, Interpretation of the Models, provides a detailed explanation of the model developed using the methodology in this subsection.

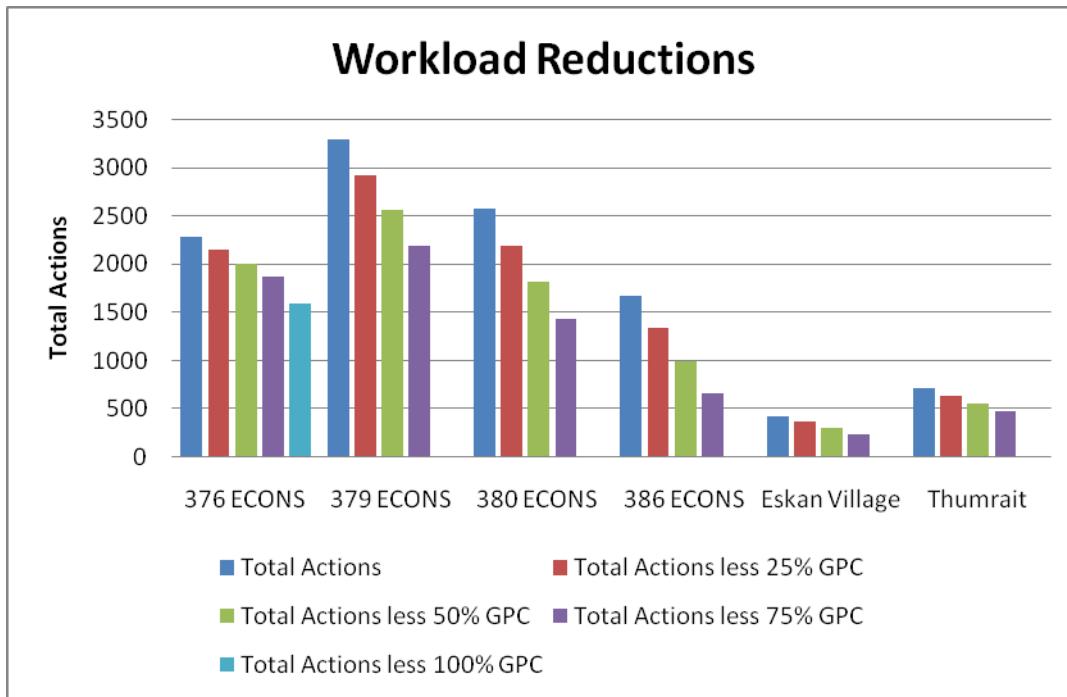


Figure 29. Workload Reductions



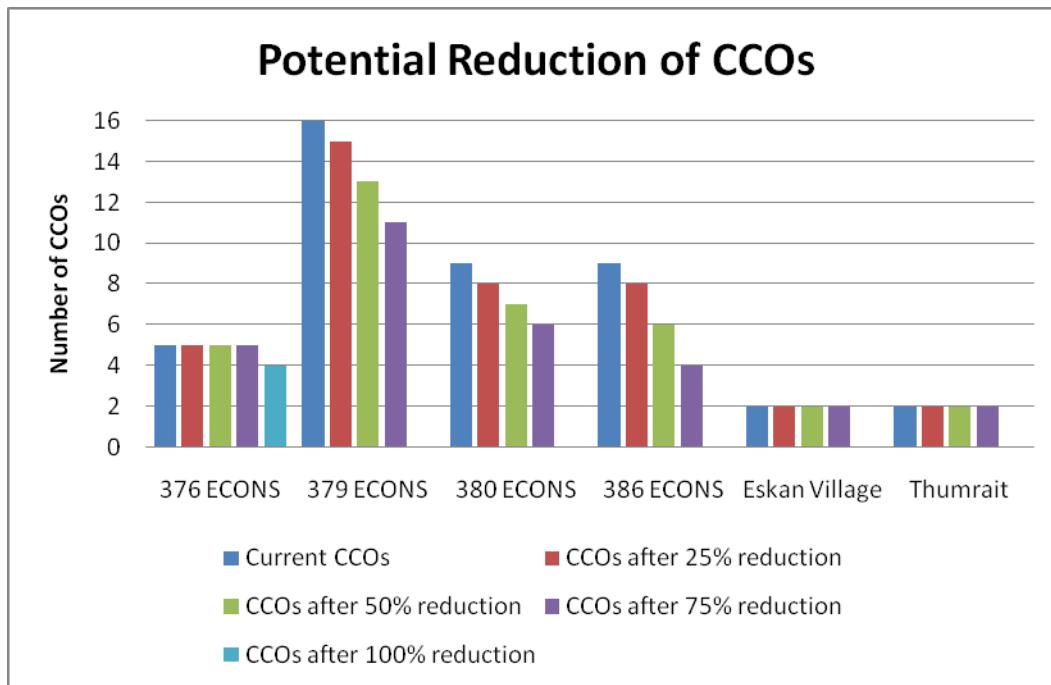


Figure 30. Potential Reduction of CCOs



Table 6. Potential Reduction Model

Office	# of CCOs	FY11 Total Actions less 25% GPC Actions	Avg Total Action per CCO	Avg Monthly Actions per CCO
376th ECONS	5	2,152.75	430.55	35.88
379th ECONS	15	2,931.75	195.45	16.29
380th ECONS	8	2,200.50	275.06	22.92
386th ECONS	8	1,340.00	167.50	13.96
Eskan Village	2	369.00	184.50	15.38
Thumrait	2	636.50	318.25	26.52
USAFCENT Total	40	9,630.50	240.76	20.06
<hr/>				
Office	# of CCOs	FY11 Total Actions less 50% GPC Actions	Avg Total Action per CCO	Avg Monthly Actions by CCO
376th ECONS	5	2,013.50	402.70	33.56
379th ECONS	13	2,565.50	197.35	16.45
380th ECONS	7	1,818.00	259.71	21.64
386th ECONS	6	1,003.00	167.17	13.93
Eskan Village	2	306.00	153.00	12.75
Thumrait	2	555.00	277.50	23.13
USAFCENT Total	35	8,261.00	236.03	19.67
<hr/>				
Office	# of CCOs	FY11 Total Actions less 75% GPC Actions	Avg Total Action per CCO	Avg Monthly Actions by CCO
376th ECONS	5	1,874.25	374.85	31.24
379th ECONS	11	2,199.25	199.93	16.66
380th ECONS	6	1,435.5	239.25	19.94



386th ECONS	4	666	166.50	13.88
Eskan Village	2	243	121.50	10.13
Thumrait	2	473.5	236.75	19.73
USAFCENT Total	30	6,891.5	229.72	19.14
Office	# of CCOs	FY11 Total Actions less 100% GPC Actions	Avg Total Action per CCO	Avg Monthly Actions by CCO
376th ECONS	4	1,592	398.00	33.17

3. Interpretation of the Models

In this subsection, we present an interpretation of the reduction models developed in Subsection 1, using the constraints and assumptions presented in Subsection 2. Based on benchmark numbers from the RICC non-complex division (F. Lacey, personal communication, October 14, 2011), we used 37 monthly actions/CCO as the average workload, for determining the number of personnel needed for a reachback cell using the 25%, 50%, and 75% solutions.

a. USAFCENT

The overall numbers for workload and personnel reduction for USAFCENT are composed of the reduced numbers of each ECONS. As shown in Figure 29, the projected total actions after 25%, 50%, and 75% GPC reductions were 9,630.5, 8,261, and 6,891.5, respectively. As Figure 30 shows, the number of personnel dropped from a total of 43 CCOs, to 39 at 25%, 35 at 50%, and 30 at 75%. This was a reduction of four, eight, and 13 personnel, respectively.

b. 376th ECONS

The 376th is unique in that it is the only ECONS location that does not use the GPC in the host nation. Although we used the same percentages for this location as for the other locations, we also added a 100% data point. As shown in Figure 29, the projected total



actions after 25%, 50%, 75%, and 100% GPC reductions were 2,152.75, 2,013.5, 1,874.25, and 1,592, respectively. As shown in Figure 30, the number of personnel required remained constant until 100% of the actions were performed stateside; at this point, the 376th could lose one person.

c. 379th ECONS

As shown in Figure 29, the projected total actions after 25%, 50%, and 75% GPC reductions were 2,931.75, 2,565.5, and 2,199.25, respectively. As Figure 30 shows, the number of personnel dropped from a total of 16 CCOs, to 15 at 25%, 13 at 50%, and 11 at 75%. This was a reduction of one, three, and five personnel, respectively.

d. 380th ECONS

As shown in Figure 29, the projected total actions after 25%, 50%, and 75% GPC reductions were 2,200.5, 1,818, and 1,435.5, respectively. As Figure 30 shows, the number of personnel dropped from a total of nine CCOs, to eight at 25%, seven at 50%, and six at 75%. This was a reduction of one, two, and three personnel, respectively.

e. 386th ECONS

As shown in Figure 29, the projected total actions after 25%, 50%, and 75% GPC reductions were 1,340, 1,003, and 666, respectively. As Figure 30 shows, the number of personnel dropped from a total number of nine CCOs, to eight at 25%, six at 50%, and four at 75%. This was a reduction of one, three, and five personnel, respectively. Although the 386th had the same number of CCOs assigned as the 380th, it lost more personnel because it had a lower number of actions per CCO.

f. Eskan Village

As shown in Figures 29 and 30, there were no reductions in workload or personnel at any percent. As stated in the assumptions, a two-person location was not modeled.



g. *Thumrait*

As shown in Figures 29 and 30, there were no reductions in workload or personnel at any percent. As stated in the assumptions, a two-person location was not modeled.

h. Required CCOs for a Reachback Cell

As previously stated, the non-complex division located at Rock Island Arsenal, Illinois, has an approximate average of 37 monthly actions per CCO. In order to develop the reachback cell model, we first calculated the number of available actions for a reachback cell using the 25%, 50%, and 75% solutions. We then used those GPC action totals to determine how many CCOs would be required if we used the non-complex average (see the USAFCENT example below) of 37 monthly actions per CCO as our benchmark. As a reference, the reduction of CCOs modeled in Table 6 was used as a comparison.

USAFCENT Example:

At 25%: 11,000 (*USAFCENT Total Actions*)
 - 9,630.50 (*USAFCENT Total Actions less 25% GPC Actions*)
 = 1,369.50 (*GPC Actions available for reachback*)

Then: 1,369.50 (*GPC Actions available for reachback*)
 ÷ 12 (*months*)
 = 114.13 (*GPC Actions/month available for reachback*)
 ÷ 37 (*RICC CCO Actions/month workload*)
 = 3.08 (*Required CCOs*)

Hence, using the workload assumption, four CCOs are required at a reachback cell.



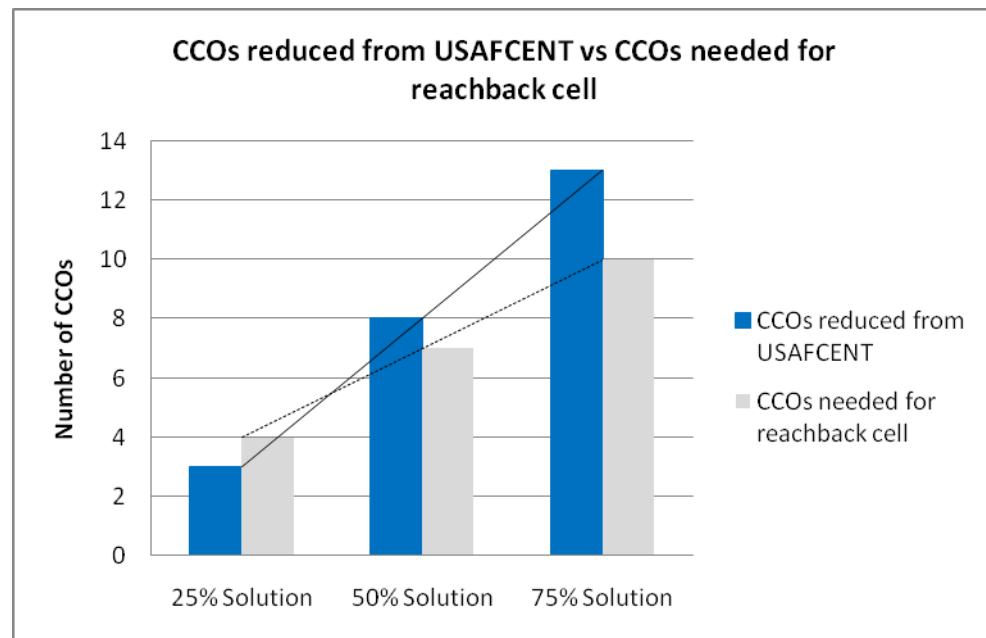


Figure 31. CCOs Reduced From USAFCENT Versus CCOs Needed for Reachback Cell

In Table 6, the number of CCOs reduced was three for the 25% solution, eight for the 50% solution, and 13 for the 75% solution. In Figure 31, the number of CCOs needed for a reachback cell is four for the 25% solution, seven for the 50% solution, and ten for the 75% solution. This means that at 25%, one additional CCO is needed; at 50%, one fewer CCO is needed; and at 75%, three fewer CCOs are needed. Figure 31 has two trend lines that show how sensitive CCO reductions and additions are to the GPC reduction solutions. The intersection represents a 1:1 ratio of CCOs reduced in USAFCENT to CCOs needed for a reachback cell. The area to the right of the intersection shows the efficiencies gained with a higher percentage of GPC actions reduced. For example, at a 75% solution, 13 CCOs can be reduced from the AOR, but 10 CCOs are needed for the reachback cell. This means that three personnel are removed completely from the deployment cycle and can now spend valuable time at their home-station unit gaining contracting experience.



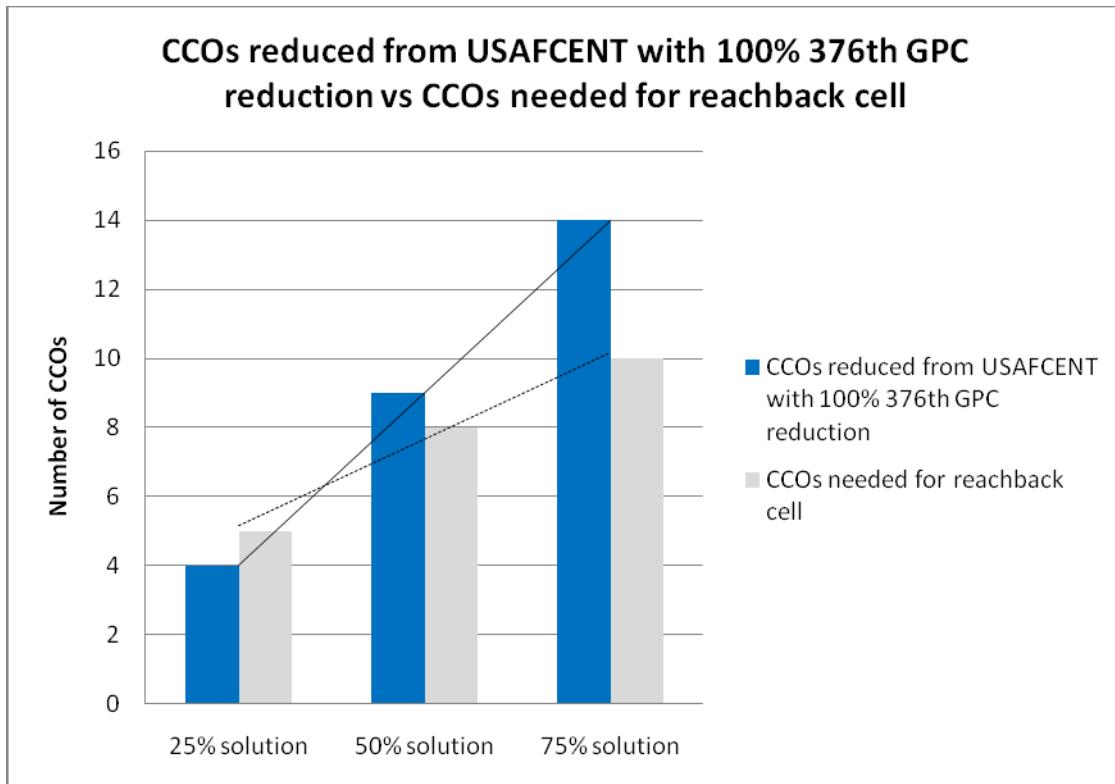


Figure 32. CCOs Reduced From USAFCENT With 100% 376th GPC Reduction Versus CCOs Needed for Reachback Cell

Figure 32 depicts the CCO reduction efficiency if the 376th 100% reduction was implemented in all reduction solutions. The total CCO reduction increased by one to account for the loss of one CCO from the 376th. This means the CCO reduction at 25%, 50%, and 75% would be four, nine, and 14, respectively. The CCOs needed for the reachback cell was five, eight, and 10. This means that at 25%, the 376th would need one additional CCO; at 50%, one fewer CCO; and at 75%, four fewer CCOs.

Figures 33–36 depict the average number of actions per CCO, depending on the manning level of the particular ECONS and the number of GPC actions reduced. The reference line depicts the average per CCO for FY11 with no reductions in GPC actions. Any bar below the line means that if the ECONS were manned at that level, the actions per CCO would be fewer than the current actions per CCO for FY11. Any bar above means the



ECONS would increase the actions per CCO if the ECONS were reduced to that number of personnel.

379th ECONS Leadership Problem Example: (based on Figure 34)

Col Jones asks, “Maj Chan, if I reduced your squadron manning from 16 to 12 CCOs, what would your workload per CCO be?”

At 25% Solution:

If the desired CCO manning is 12,

then, move the black bar up the Y-axis until it is tangent with top of the 12 CCO manning bar.

So, the minimum required workload equals 20.36 Monthly Actions/CCO.

These figures are helpful as a reference for leadership to see how the number of personnel affects the number of actions per CCO. For example, if it was determined that an ECONS could move up its rate of action per CCO, it would be easy to pinpoint how many CCOs were needed at the 25%, 50%, and 75% solutions. Figure 33 is unique in that it pertains to the 376th, which only has the 100% reduction. The same information can be gained from this figure as from Figures 34–36.



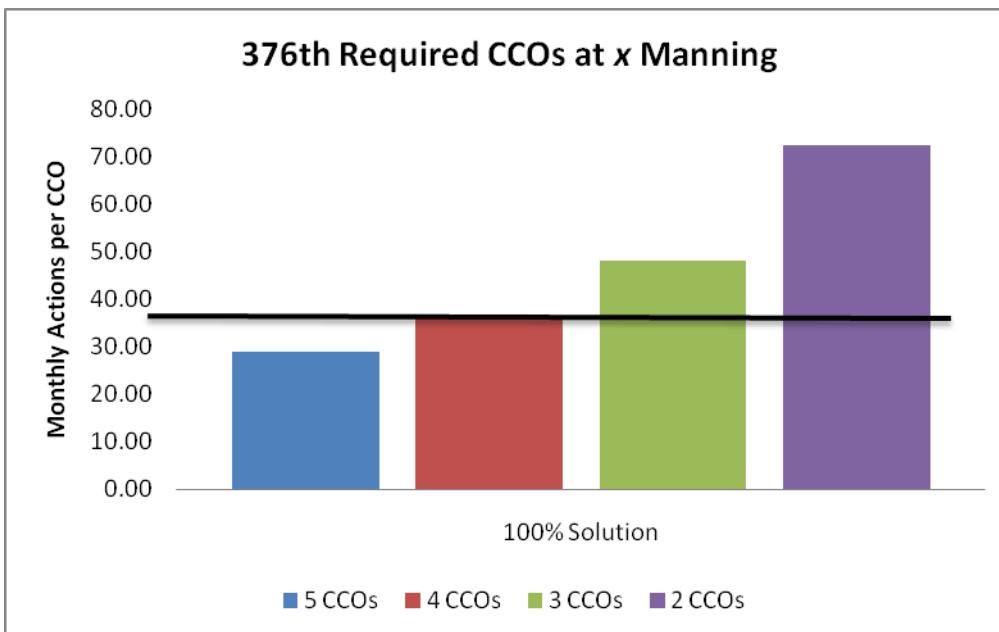


Figure 33. 376th Required CCOs at x Manning

Note. The black bar equals the current workload of 38.20 monthly actions/CCO.



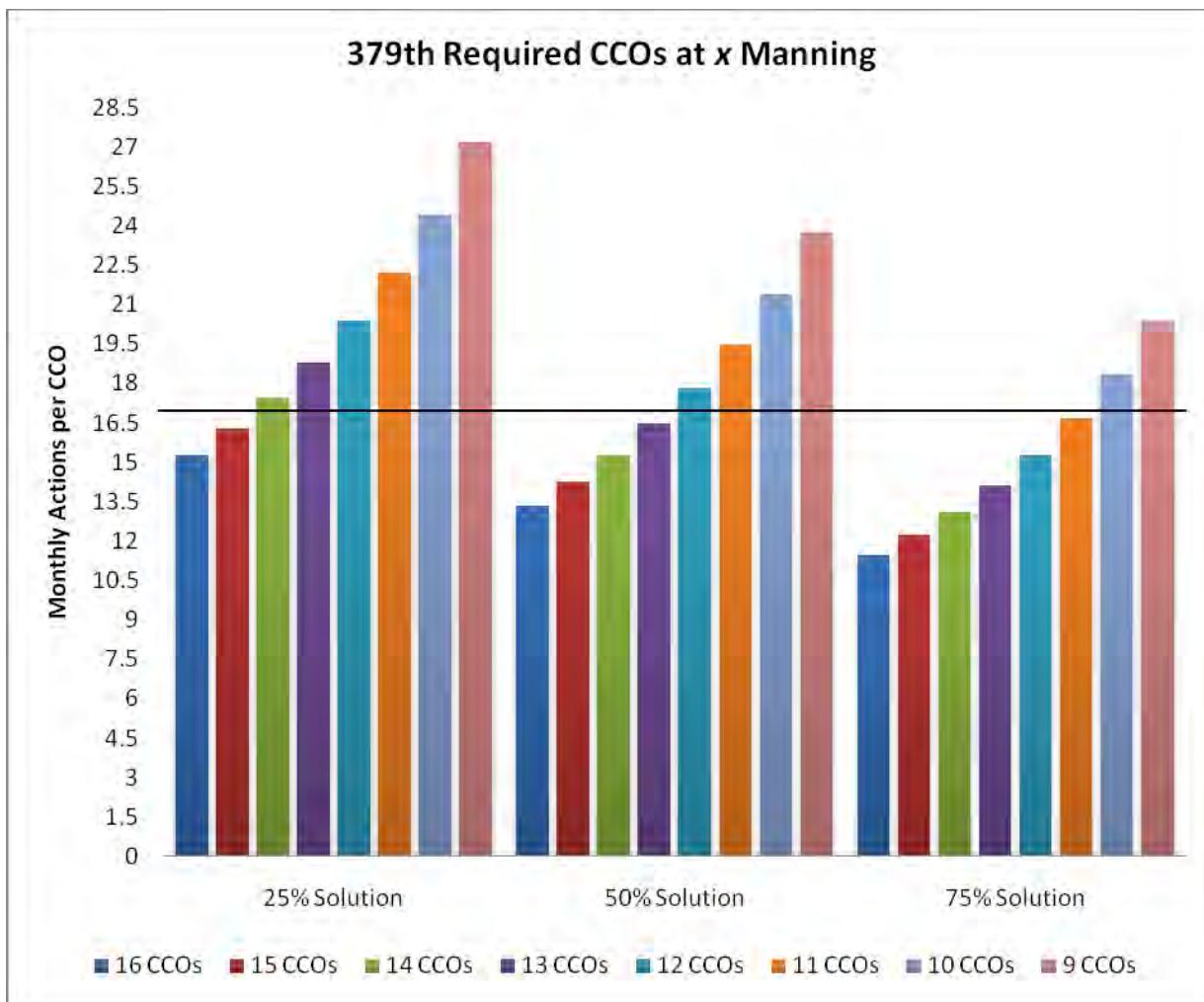


Figure 34. 379th Required CCOs at x Manning

Note. The black bar equals the current workload of 17.18 monthly actions/CCO.



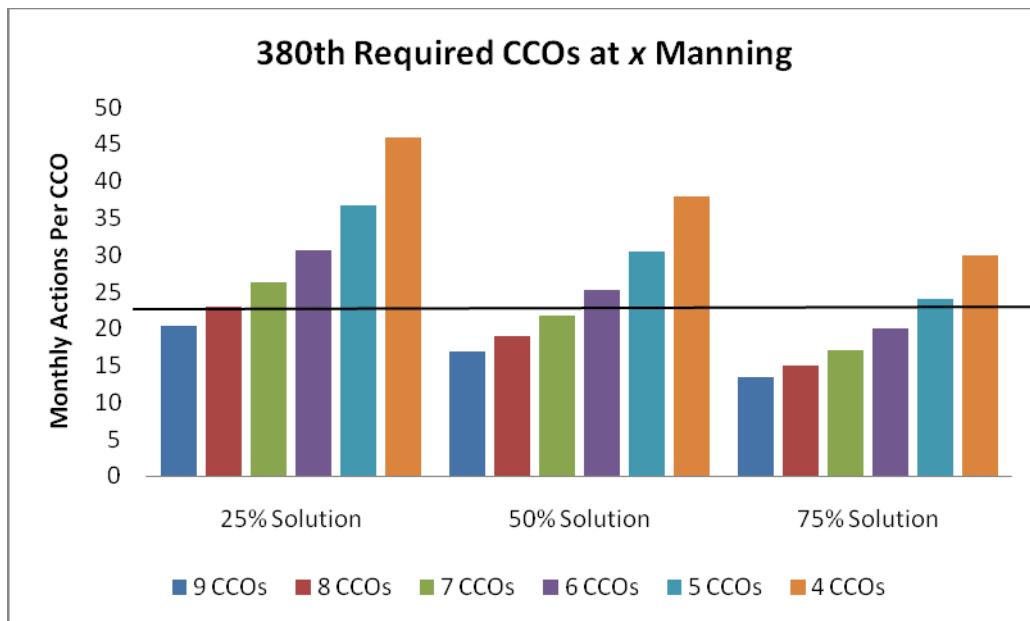


Figure 35. 380th Required CCOs at x Manning
Note. The black bar equals the current workload of 23.92 monthly actions/CCO.

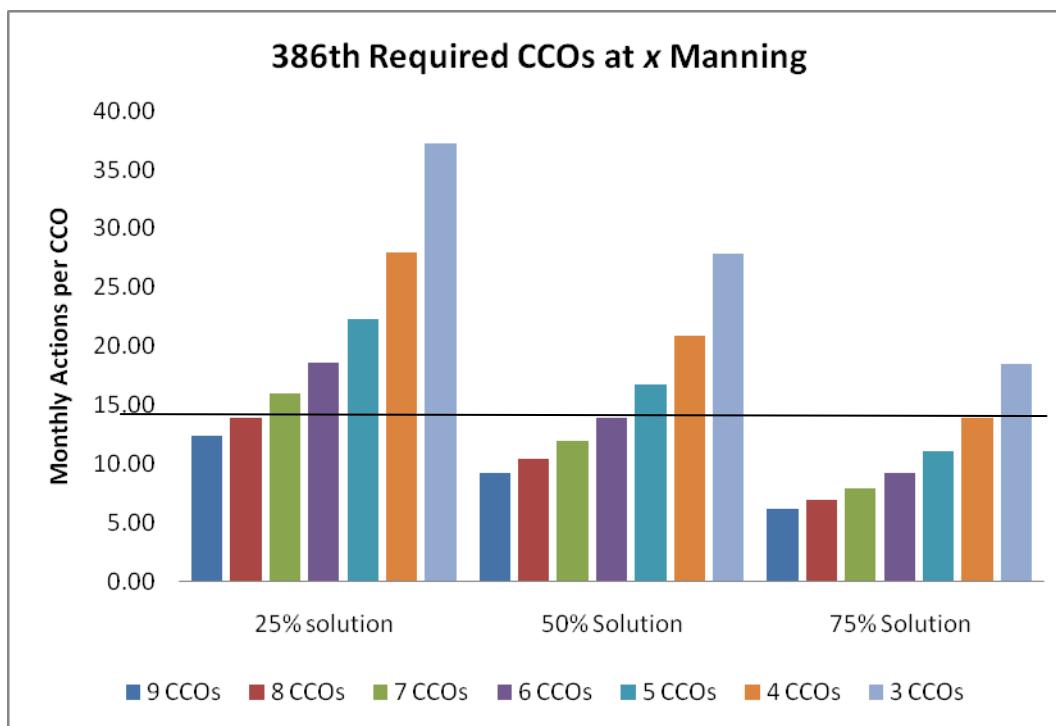


Figure 36. 386th Required CCOs at x Manning
Note. The black bar equals the current workload of 15.53 monthly actions/CCO.



D. SUMMARY

In this chapter, we provided our findings and analysis of the data from Chapter III. This included the interpretation of the data and the methodology we used to determine workload averages per CCO for each squadron. Using the monthly actions per CCO based on the current FY11, we calculated the potential CCO reductions when 25%, 50%, and 75% of GPC actions were reduced from the total actions. Through the use of visual aids, readers will understand that reductions can be made throughout USAFCENT, especially to the three larger squadrons: the 379th, 380th, and 386th ECONS. Because the 376th ECONS is the only squadron that does 100% of its GPC actions with stateside vendors, we determined that one additional CCO can always be reduced AOR-wide, even if the other squadrons are subject to the 25%, 50%, and 75% solutions. After our interpretation of the data, we discussed the assumptions and constraints we followed before calculating the potential reductions. These assumptions and constraints should be considered by leadership before making any decision on the reduction potentials. Finally, we presented the number of CCOs required at a reachback cell using the RICC workload as a benchmark.



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V. SUMMARY, CONCLUSIONS/RECOMMENDATIONS, AND FURTHER RESEARCH

A. SUMMARY

The purpose of this research was to answer our primary research question: What is reachback viability for USAFCENT Government Purchase Card (GPC) purchases? As stated in Chapter I, there are more reasons to reachback than just managing the military supply chain. Deploying members to the AOR comes with burdens placed on home-station personnel and the family members of the deployed member. If decentralizing GPC purchases at a reachback cell can reduce at least one person in the USAFCENT AOR, AF leadership should consider it. Along with our primary research questions, four subsidiary questions guided our study.

In Chapter II, we answered the subsidiary questions: Is the U.S. military currently employing reachback for contingencies? and What are the advantages and disadvantages of reachback? We learned that the U.S. military does currently employ reachback across all the branches. The Air Force has applied reachback for civil engineering support through AFCESA and combat support through RPA. The Army has taken tremendous steps in creating the Rock Island Contracting Center (RICC)–Reachback Division. The non-complex division of RICC currently does purchase orders and GPC reachback for Joint Theater Support Contracting Command (JTSCC). This unit serves as a prime example that reachback could be done for USAFCENT. We discussed the advantages and disadvantages of reachback using research conducted by the RAND Corporation researchers (Ausink et al., 2011) and the USAFCENT PMA team (Benivegna et al., 2011). We also discussed business organization concepts, such as centralization. We showed where reachback could be advantageous to the four phases of contingency contracting and the Phase Zero theory (Yoder, 2008).

In Chapter III, we analyzed data provided by USAFCENT (AUAB CAOC, 2011) in order to answer the subsidiary research question: What percentage of GPC purchases in the AOR are provided by U.S. vendors/supplier? Due to the limitations of the data, we were only able to determine the percentage of dollars spent in the U.S. However, we were able to



extrapolate the data and determine the number of total actions awarded to U.S. vendors. Using this information and the current manning levels of USAFCENT, a monthly actions/CCO workload was calculated for each base. We also presented a side-by-side comparison of each contracting office's statistics so that AF leaders could observe workload trends through the AOR.

In Chapter IV, we interpreted the data presented in Chapter III in order to answer the subsidiary question: What would a USAFCENT personnel reduction model look like? Because there wasn't sufficient data on total GPC actions awarded to U.S. vendors/suppliers, we developed models where 25%, 50%, and 75% of GPC actions were reduced from USAFCENT total actions and sent to a reachback cell. Using assumptions and constraints set by our research, we determined that personnel can be reduced using GPC reachback cells. In fact, with a 75% USAFCENT GPC reduction combined with a 100% 376th ECONS GPC reduction, 14 personnel can be reduced from the AOR, and only 10 are needed at a reachback center.

B. CONCLUSIONS

1. GPC Reachback Is Viable

Based on our primary research question (What is the reachback viability for USAFCENT GPC purchases?), our conclusion is that reachback is not only viable but should be implemented for its benefits. Even at low-scale utilization, if 25% of GPC actions were awarded stateside (plus the additional CCO from the 376th), four CCOs could be moved to a reachback cell for a reduction of 9.3% in the current manning. At the high end of the scale, if 75% of GPC actions were awarded stateside (plus the additional CCO from the 376th), 14 CCOs could be moved to a reachback cell, which would be a 42.33% reduction in the current manning. Any increase over 75% would result in additional CCOs that could be moved to a reachback cell. As noted in Chapter IV, this reduction would not increase the contracting actions per CCO of the personnel that would be left at each ECONS.

There are additional benefits other than the reduction of currently deployed personnel. By establishing a CONUS reachback cell, the deployment pool could be increased by utilizing personnel medically unqualified to deploy overseas. This increase of



the deployment pool would increase the time CCOs spend at their home-station before re-deploying.

Another benefit is that by consolidating the personnel from the ECONS into one office, the number of CCOs needed to accomplish the work could decrease. For example, if 75% of the actions were awarded stateside (plus the additional CCO from the 376th), 14 CCOs could be reduced in the AOR, but the reachback cell would only need 10 CCOs to do the work. This means four fewer CCOs would be deployed every six months.

As mentioned in the RAND focus groups, deployments are a major contribution to retention issues. By reducing the number of deployed personnel and increasing the dwell time, the AF could increase its retention rate. There would also be a monetary savings due to the decrease in the number of personnel sent to training and to deployed locations. After a review of all the data, we conclude that reachback for GPC purchases is viable and should be implemented as soon as possible.

C. RECOMMENDATIONS

Based on the research presented in previous chapters, we make three primary recommendations.

1. Reachback Test Cell

We recommend that USAFCENT immediately establish a reachback test cell in order to put the theory into practice. By creating a test cell, USAFCENT can determine the efficacy of reachback and gather data over a specified amount of time. We recommend a minimum of two deployment cycles to ensure the cell is able to capitalize on its capabilities and efficiencies. The data will help determine appropriate manning levels (to include if civilian positions are needed), funding, best practices, whether or not the current test cell location is effective, and lessons learned. By testing this model now, USAFCENT can determine the effectiveness of reachback and, if the test is successful, it can become a broader part of the AF's contracting policy. We should not wait for the next war before implementing reachback; this initiative should happen now.



2. Operational Plans

We suggest adding reachback cell capabilities to current policies, such as Joint Publication 4-10 (U.S. Joint Forces Command, 2008), the *Defense Contingency Contracting Handbook* (Yoder et al., 2010), and any additional future operational plan that pertains to contingency contracting. The Army currently performs reachback and, as shown in our research, reachback for USAFCENT is viable. To make sure reachback opportunities are evaluated for possible implementation in any current or future contingency, it is imperative for it to become part of all contingency plans. This does not mean reachback will be the right answer for every contingency, but that it is at least part of the tools that are debated when a contingency happens. If a reachback cell is deemed necessary at the beginning of a deployment, it can help reduce boots on ground and can be a force multiplier for the troops that do deploy.

3. Data Collection

Accurate, detailed information is important and can be used to identify efficiencies that might be gained in deployed contracting. It is our recommendation that USAFCENT collect the number of GPC actions performed stateside and in the host nation. Only the number of dollars spent in the host nation is collected currently, which is good, but without the number of actions is incomplete. For example, if \$10,000 was counted as host-nation dollars, this spending could be the result of one \$10,000 action or of 30 separate actions. Without the action number, leadership can only guess how many actions are awarded to the host nation. Adding this measurement would not incur a large amount of manpower. Depending on the database the ECONS uses, the solution could be as simple as adding a checkbox. This number would allow leadership to determine quickly how many actions are being performed stateside and the percentage of those actions to total actions.

D. AREAS FOR FURTHER RESEARCH

1. Workload Study

There is a wide range in the number of actions per CCO at USAFENT locations. This could be due to numerous factors, but these factors should be reevaluated.



This is important not only because some ECONS might be overemployed but also because some might be underemployed. At the same time, it would be beneficial to understand why there is such a difference in the number of actions per CCO between the ECONSSs. This could be due to an innovation at a unit or possibly a streamlined approach at another. Quantifying these differences would allow management to better understand them and could possibly change the allocation of resources. We recommend a workload study as soon as possible to help identify the optimum personnel at each location.

2. Additional Reachback

Although we looked at only GPC purchases, we recommend doing additional research on reachback to include purchase orders, close-out, and major source selections. Each additional type of reachback should be studied to look at the effects it would have on each ECONS. By performing reachback on other parts of the procurement process, additional personnel could possibly be moved from a deployed location to the reachback cell. This would also have all the additional benefits discussed for GPC reachback. If the implementation of the GPC reachback cell is considered a success, then additional processes could be added, if deemed feasible.



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LIST OF REFERENCES

Adrian, L. (2010, October). Providing stateside support to deployed contracting elements. *ACC Today*, 14–15.

Ausink, J. A., Castaneda, L. W., & Chenoweth, M. E. (2011). *Air Force contingency contracting: Reachback and other opportunities for improvement*. Santa Monica, CA: RAND.

Benivegna, T., Ackiss, J., Balaji, V. P., & Michael, R. (2011, July). *Expeditionary contracting squadron procurement management assessment*. Shaw AFB: USAFCENT/A7K.

Berns, J. D. (2010, October 15). *CENTCOM contracting command (C3) reachback support program (non-complex)* [Standard operating procedure]. Baghdad, Iraq: CENTCOM Contracting Command.

Cascio, W. (2000). Managing a virtual workplace. *Academy of Management Executives*, 14(3), 81–90.

Correll, R. S. (2008, September 23). *Deployment posturing* [Memorandum]. Washington, DC: Office of the USAF Deputy Assistant Secretary (Contracting), Assistant Secretary (Acquisition).

Correll, R. S. (2010, February 16). *Contracting functional area manager: Prioritization and sequencing guidance* [Policy letter]. Washington, DC: Office of the USAF Deputy Assistant Secretary (Contracting), Assistant Secretary (Acquisition).

D'Angelo, A. F., Houglan, D. H., & Ruckwardt, E. (2007, November). *The need for a strategic approach to contingency contracting* (NPS-CM-07-129). Monterey, CA: Naval Postgraduate School, Acquisition Research Program.

Department of the Air Force presentation to the Subcommittee on Military Personnel, Committee on Armed Services, United States House of Representatives: Military personnel overview and DOD's proposed personnel efficiencies, 112th Cong. (2011) (testimony of Lieutenant General Darrell D. Jones).

Federal Acquisition Regulation (FAR), 48 C.F.R. ch. 1 (2011).

Kraljic, P. (1983). Purchasing must become supply management. *Harvard Business Review*, 61, 109–117.

MBA Knowledge Base. (2010). *Meaning of centralization and its advantages and disadvantages*. Retrieved September 23, 2011, from



<http://www.mbaknol.com/management-concepts/meaning-of-centralization-and-its-advantages-and-disadvantages/>

Michael, R., Mazur, J., Sackett, A., & Mahar, M. (2008, March). *Expeditionary contracting squadron procurement management assessment*. Shaw AFB: USAFCENT/A7K.

Moore, N. W., Baldwin, L. H., Camm, F., & Cook, C. R. (2002). *Implementing best purchasing and supply management practices: Lessons from innovative commercial firms*. Santa Monica, CA: RAND.

Neal, J. M. (2000, September–October). A look at reachback. *Military Review*, 39–43.

Porter, M. E. (2008). The five competitive forces that shape strategy. *Harvard Business Review*, 1–18.

The Reachback Research Center. (n.d.). The human terrain system. Retrieved from <http://humanterrainsystem.army.mil/Newsletter.aspx>

Rendon, R. G. (2005, Summer). Commodity sourcing strategies: Processes, best practices, and defense initiatives. *Contract Management*, 7–20.

Tirpak, J. A. (2009, March). Beyond reachback: New ISR systems and techniques put awesome intel at the fingertips of practically any warfighter. *Air Force Magazine*, 30–34.

U.S. Air Forces Central Command. (2011, August 1). *U.S. Air Forces central*. Retrieved August 14, 2011, from <http://www.afcent.af.mil/library/factsheets/factsheet.asp?id=10049>

U.S. Joint Forces Command. (2008). *Operational contract support (JP 4-10)*. Suffolk, VA: Joint Warfare Center.

Yoder, E. C. (2004, December). *The Yoder three-tier model for optimal planning and execution of contingency contracting* (NPS-AM-05-002). Monterey, CA: Naval Postgraduate School, Acquisition Research Program.

Yoder, E. C. (2010, August). *Phase zero operations for contingency and expeditionary contracting: Keys to fully integrating contracting into operational planning and execution* (NPS-CM-10-160). Monterey, CA: Naval Postgraduate School, Acquisition Research Program.

Yoder, E. C., Long, B., Travieso, J., Harper, L., Obata, M., George, J., ... Johnson, D. (2010). *Defense contingency contracting handbook*. Maxwell AFB: AFLMA.



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